

Point-of-sale system **ANYSHOP e2 Qs**



Use'r manual

POSBANK®

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POSBANK Use'r manual Revision History

Changes to the ANYSHOP e2 Qs Use'r manual are listed below.

Rev No.	Revision History	Date /author
ANYSHOP e2_Qs_UM_eng_PBUM_E(Rev001;140404)	D25	2014.07.03
ANYSHOP e2_Qs_UM_eng_PBUM_E(Rev002;140703)	D25	2014.09.26

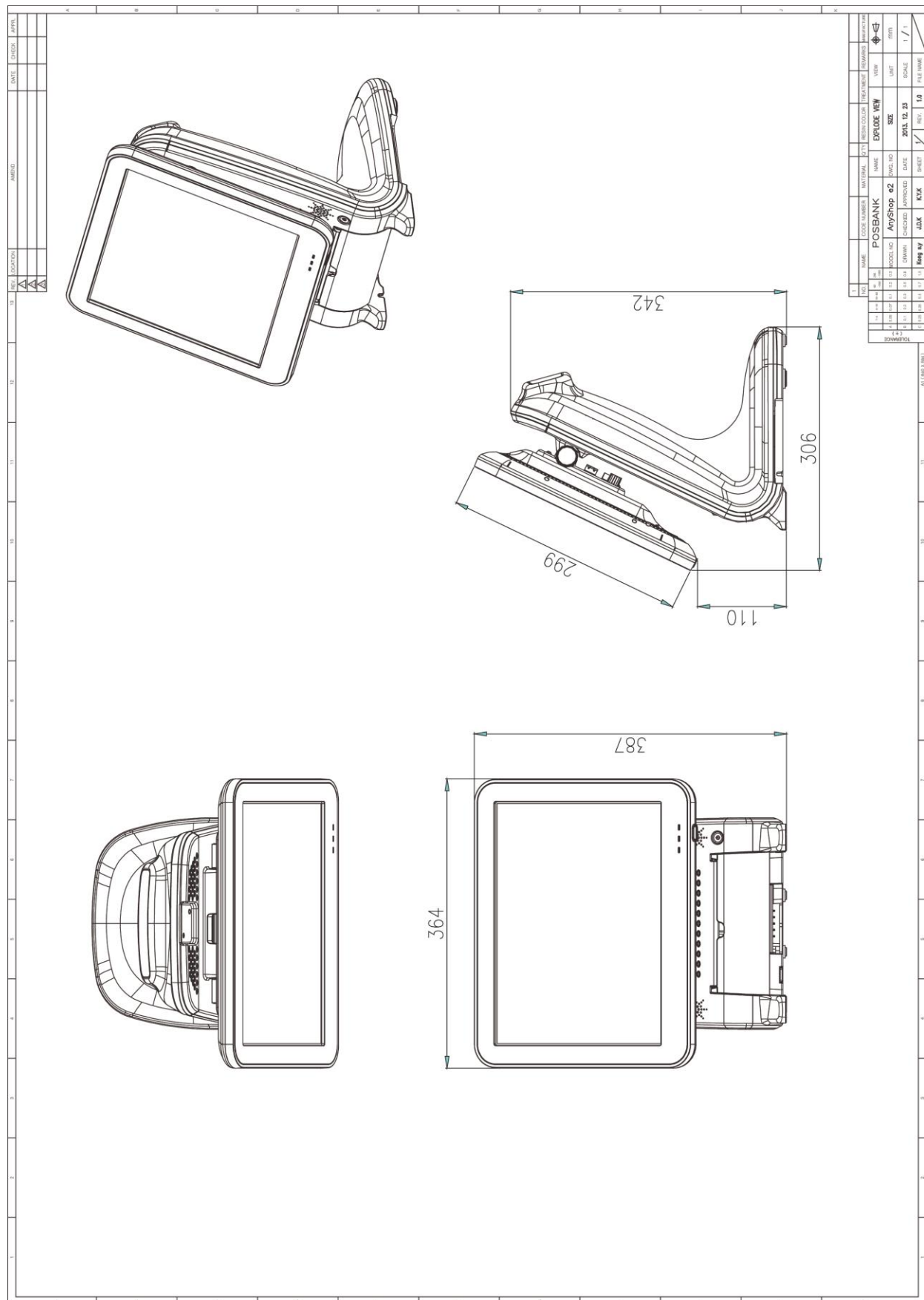
Specification

ANYSHOP e2 Qs			
CPU		uPGA988 for 2nd and 3rd Generation Intel® Core™ i7/i5/i3, Intel® Pentium, Intel® Celeron Processors	
Chipset		Intel QM77	Intel HM76
Storage		SATA 3 (6Gb/s) 2.5 inch HDD or SSD (Max. 2 Optional), Support AHCI (SSD: 64GB or 32GB / HDD: 320GB)	
		Support AHCI	
Memory		DDR3-1600MHz SODIMM Default 2GB (MAX. 8GB)	
Graphic		Integrated Intel GFX	
AMT		Support iAMT 8.0	
Display	Resolution	15" LED Backlight LCD 250 cd/m² (1024 x 768 resolution)	
	Touch screen	5-wired Resistive Touch	
	Viewing angle		
Internal I/O	USB	3 Ports (reserved for touch controller, SCR EMV card, MSR controller)	
	Serial port	COM 5 (reserved for cash drawer port) & COM 6 (reserved for MSR)	
	Display port	LVDS or VGA & COM 4 (reserved for CDP)	
	Extension slot	Mini PCIe	
	Primary display	24bit LVDS	
External I/O	USB	Rear 6 (USB 3.0 x 4 ports, USB 2.0 x 2 ports)	Rear 4 (USB 3.0 x 2 ports, USB 2.0 x 2 ports)
	PS/2	1 Port (reserved for Keyboard & Mouse)	
	Serial port	COM 1 ~ 3 with 5V/12V power output on 9pin	
	LAN	Gigabit Ethernet x 2 ports 1 x Intel Gigabit LAN with iAMT 8.0 (Intel 82579LM) 1 x Intel Gigabit LAN with (Intel 82583V)	1 port x Intel Gigabit LAN with (Intel 82583V)
	Audio	Realtek ALC 892 / Line-out, Mic-in	
	Display port	VGA x 1 port	
Options	MSR	Comply with ISO 7811, Support 1 & 2 & 3 track	
	Speaker	2 x 0.8W (Stereo)	
	Side USB	4 ports (USB 2.0 x 4 ports)	
	Serial port	-	
	SCR	EMV level 1	
	Dallas	Dallas I-button reader	
	Back up battery	Smart battery (supports up to 1 packs)	
	Customer display	VFD type (20 x 2)	
	2nd LCD	10.1" LCD or 12.1" LCD (1024 x 768 resolution)	
	2nd storage	2nd 2.5 inch HDD / SSD storage	
	Cash drawer port	1 Port (RJ11)	
	Parallel port	1 Port	
	WiFi	Mini PCIe for wireless LAN	
	Operating Temperature		0 °C ~ 40 °C at 10% ~ 80% humidity
Storage Temperature		-20 °C ~ 60 °C at 10% ~ 80% humidity	
Qualification		CE, FCC, KC	
Power		Adaptor 12V/ 5A	
OS Support		Windows 7, Windows 8, POS Ready 7, POS Ready 2009	
Dimension (W x H x D)		2nd 2.5 inch HDD / SSD storage	

*Product specifications may differ according to region and may be changed without prior notice.

*MSR is not supported PS/2 interface

Specification – Outside size



Preface

This User's Guide gives information about main unit/IO port layout, basic setup, component installation, and board layout for point of sale system "ANYSHOP e2 Qs"

Intended Audience





The User's Guide is intended for technically qualified personnel.
It is not intended for general audiences.

Document Organization

The chapters in this Product Service manual are arranged as follows:

1. product package contents
2. system configuration
3. Harness (cable connector)
4. BIOS Setup
5. Installing and Replacing POS SYSTEM Components: instructions on how to install the motherboard and other POS hardware components.
6. Product specification

SYMBOL; MARK

	<p>CE MARK</p> <p>This device complies with the requirements of the EEC directive 2004/108/EC with regard to "Electromagnetic compatibility" and 2006/95/EC "Low Voltage Directive".</p>
	<p>FCC</p> <p>This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:</p> <ol style="list-style-type: none">(1) This device may not cause harmful interference.(2) This device must accept any interference received, including interference that may cause undesired operation.
	<p>KC</p> <p>Korea Certification mark. Certificate No. -</p>
	<p>WEEE</p> <p>Recycling and disposal of electric and electronic devices and their components</p> <p>This product should not be mixed with other commercial wastes for disposal.</p>

Copyright

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* Other names and brands may be claimed as the property of others.

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Warranty

We guarantee our POS terminal product and its parts against defects in materials and workmanship, under proper use, for a standard period of 2 years from the original date of purchase.

During this period, we will repair or replace defective and/or faulty products or parts without charge to the customer for parts and labor.

The 1st year includes servicing and new or refurbished replacement parts free of charge, with one-way shipping costs borne by the seller. The customer shall, however, be responsible for the return delivery costs. The 2nd year also includes free of charge servicing and parts, but a limited warranty requires the entire shipping cost to be borne by the customer.

Products out of the warranty period or scope shall be diagnosed at the customer's expense.

In the case of product damage due to error on part of the consumer, incorrect usage, carelessness or natural phenomenon, the customer shall bear the full cost for both repair and delivery.

Safety Instructions

1. To disconnect the machine from the electrical power supply, turn off the power switch and remove the power cord plug from the wall socket.
2. The wall socket must be easily accessible and in close proximity to the machine.
3. Read these instructions carefully. Save these instructions for future reference.
4. Follow all warnings and instructions marked on the product.
5. Do not use this product near water.
6. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
7. Slots and openings in the cabinet and the back or bottom are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered.
8. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.
9. This product should never be placed near or over a radiator or heat register or in a built-in installation unless proper ventilation is provided.
10. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

Notice

1. Always ensure that the correct power voltage is used as a precaution against fire and electrical shock.
2. Avoid exposing product to direct sunlight. Do not use product in areas of high humidity.
Doing so may cause low reliability and/or operational malfunction.
3. Be careful of static electricity on PCB of system with anti-static appliances. Doing so may cause inferior reliability and shorted product life.
4. Keep product away from highly static areas. This may lead to inferior performance and reduced life cycle.
5. Do not interfere with, or obstruct metal components inside product. Doing so may cause the risk of fire or electric shock.
6. Do not pull on power cable or peripheral devices' connector cable. Doing so may cause fire, electric shock or electronic system malfunction.
7. Use caution when around other electronic devices with possible high frequency or electro-magnetic effects e.g. Audio, Electronic-range etc. Doing so will lead to the serious risk of product malfunctioning or a system error occurring.
8. Ensure that batteries are replaced correctly. Failure to do this may result in sudden explosions.
9. Dispose of used batteries properly according to the instructions.

Liability Limitation

• Installation and maintenance

We recommend that you inquire about product installation, maintenance and repair service from the official service center and agent office.

POSBANK takes no responsibility for malfunctions or system errors occurring after service and/or system check carried out by unofficial service providers.

• High frequency appliances

This product is qualified by FCC, CE and KC compliances, and is thus governed by these qualifications' safety regulations.

However, the product can affect and be affected by other high frequencies generated around it. As such, POSBANK does not consider liability for any system error or disorder due to this issue.

• Electronic noise emitting equipment

We recommend using the product away from electronic noise emitting equipment such as heaters, motors, fluorescent lights, TVs etc. as it may cause interruption or interference with normal operation.

• Installation location

For optimal performance, the product should be kept in an environment of lower than 65% humidity and in a temperature of 10 ~ 30 °C. Please also keep away from direct sun-light.

• Cleaning procedure

Cleaning with chemical based products (in particular those containing benzyl or chemical thinning agents) can damage the exterior surfaces of the product. We recommend using a soft damp cloth and wiping gently, taking particular care when dealing with the LCD display screen.

• Product limitations

1. The use of this product for anything other than POS tasks is strictly prohibited.
The product is not supported for regular PC and interface operation.
2. This product is for business use only, and not for usage in the home.
3. Both hardware and software are both fully configured.
4. Normal operating is guaranteed on a steady power connection.

Installation Recommendations

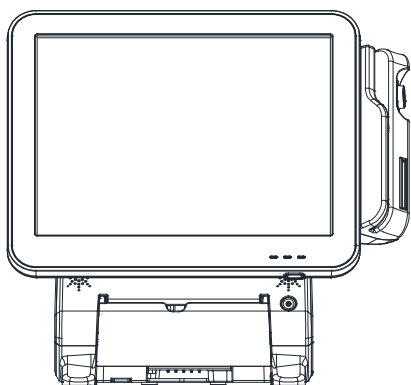
1. Avoid installing during thunderstorms. (Possibility of dangerous exposure to electricity.)
2. Install away from damp spaces or water-leaks.
3. Beware of static occurrence during installation.
4. Use only ground connected and quality certified power cords and cables.
5. Keep out of direct sun-light, extremely high or low temperatures, or high humidity areas.
6. Install product away from areas prone to shocks or vibration.
7. Install product away from sewing machines, welding equipment, electric stoves, audio equipment and other high frequency generating equipment.
8. Installation and use in close proximity to an air-conditioning unit is not recommended.
9. Do not connect cables underneath carpets or floorboards.
10. Only use power cables supplied by pre-approved and certified venders.
11. Never use power cords from high power source appliances.
e.g. Electronic heaters, Electric stoves, Audio equipment, Air-conditioners, Refrigerators etc.
12. The use of multiple connections in a shared power outlet/socket is not recommended.

1. Product Overview

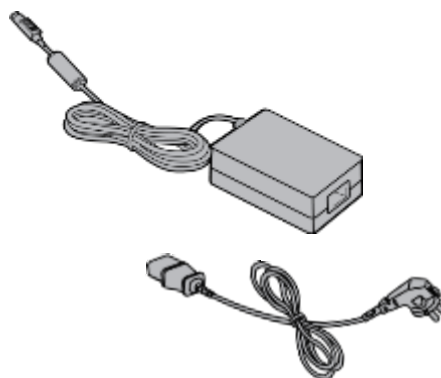
(1) Inside Your Package

1. Please check your package and confirm its contents.
2. The POS terminal main unit, power cable, user manual and driver CD are included in the package. If any items are missing or damaged, please contact your dealer for assistance.
» All user manuals and drivers are available for download on our website: www.posbank.com

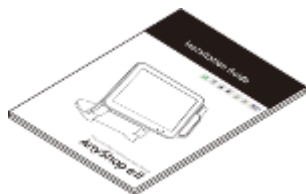
ANYSHOP e2 Qs Main unit



Adapter / Power cord



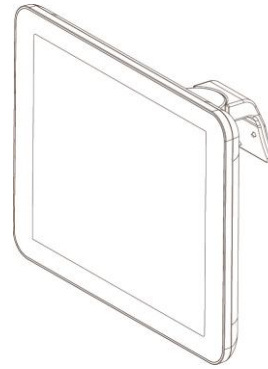
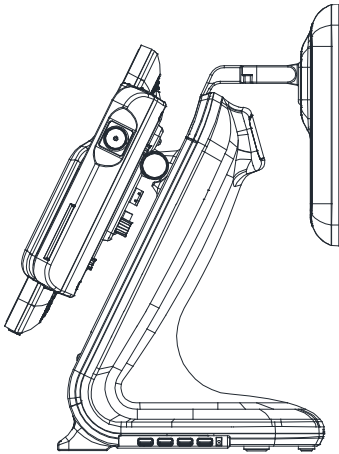
Installation guide



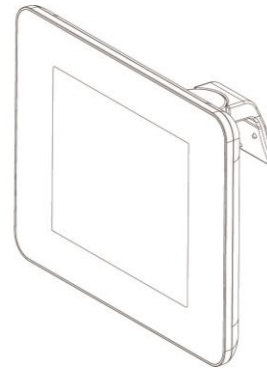
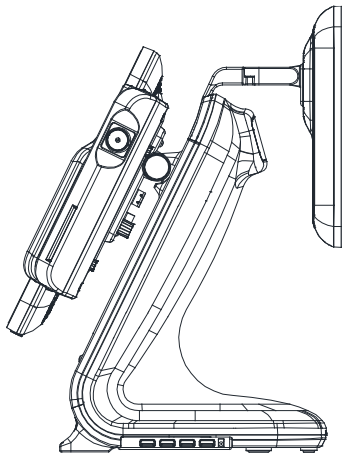
Drivers CD

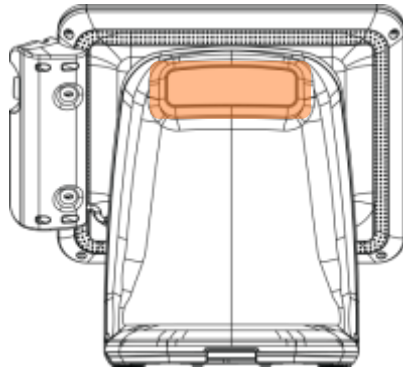


Optional Devices: 2nd LCD monitor 12.1"



Optional Devices: 2nd LCD monitor 10.1"





(2) Pre-installation Preparation

1. Remove protective film from touch-screen to prevent possible operating difficulties.
2. Attach all optional parts before setting up the main POS unit.

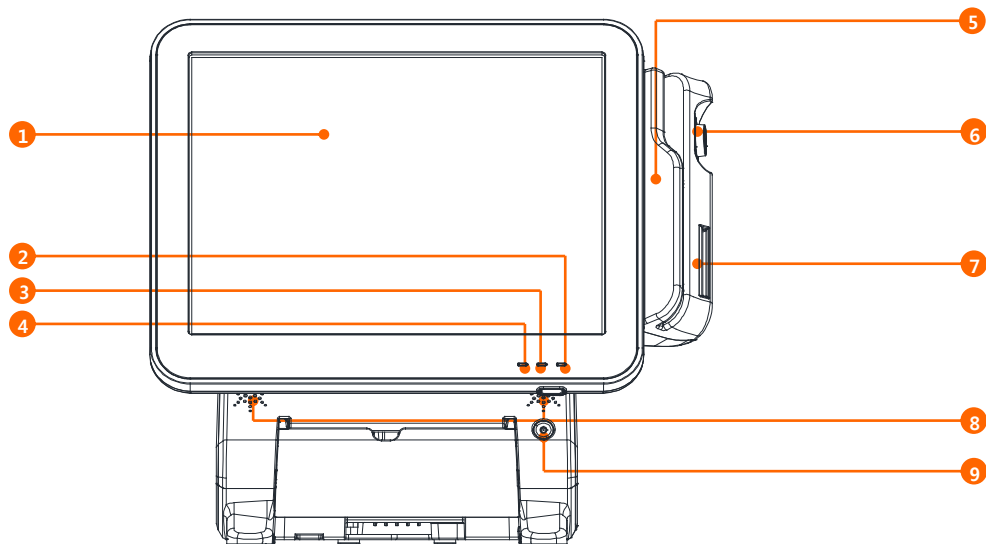
(3) Product Outline

- Each part of product may differ depending on the specific POS model.
- Model-specific data sheets are provided on our website at www.posbank.com

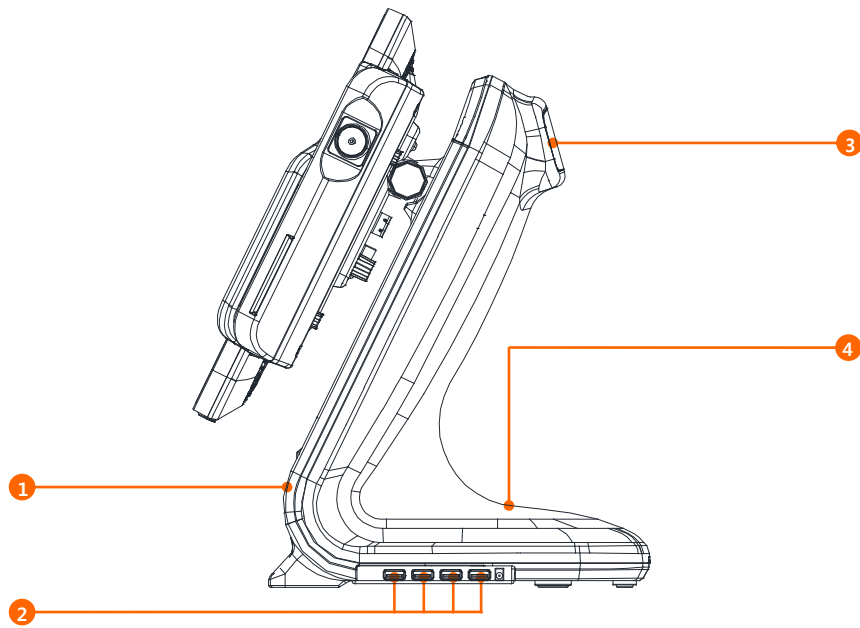
(4) Configuration

Refer to following diagram to identify the components on this side of the system.

Front view



1. LCD & Touch panel display
2. LAN LED
3. Storage(Default: SSD) LED
4. Power LED
5. Magnetic stripe reader(MSR); Option
6. Dallas I-button reader; Option
7. Smart card reader(SCR); Option
8. Dual speaker
9. Power switch

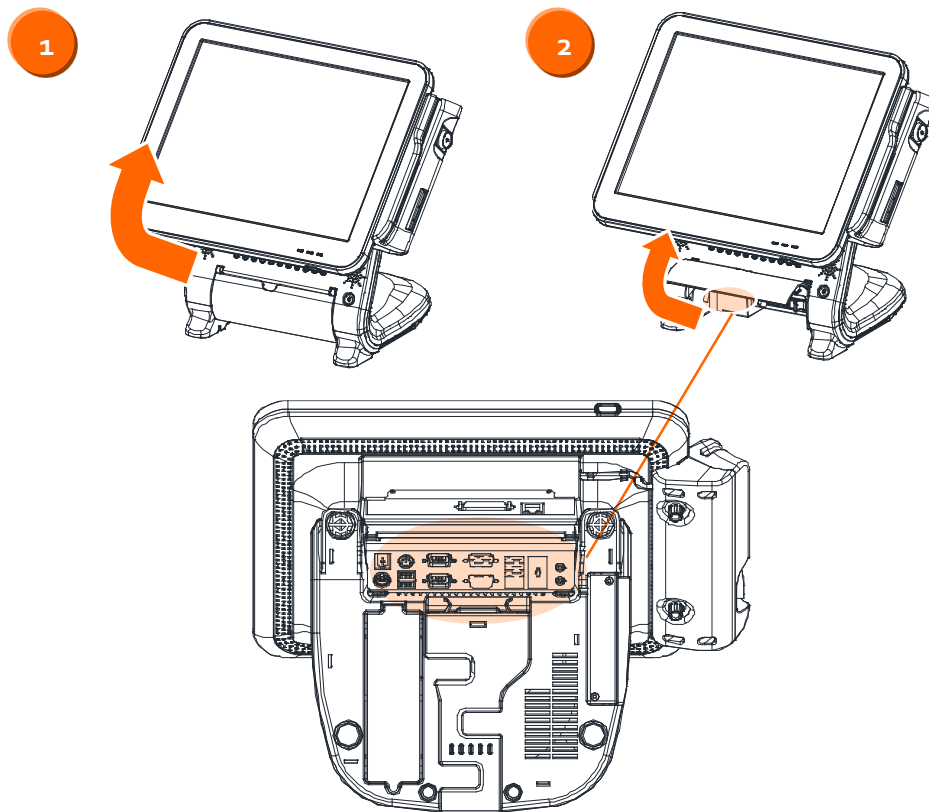


1. I/O port cover
2. USB port ;Option
3. Customer display;Option
4. Storage (Default: SSD)

(5) I/O port: Details

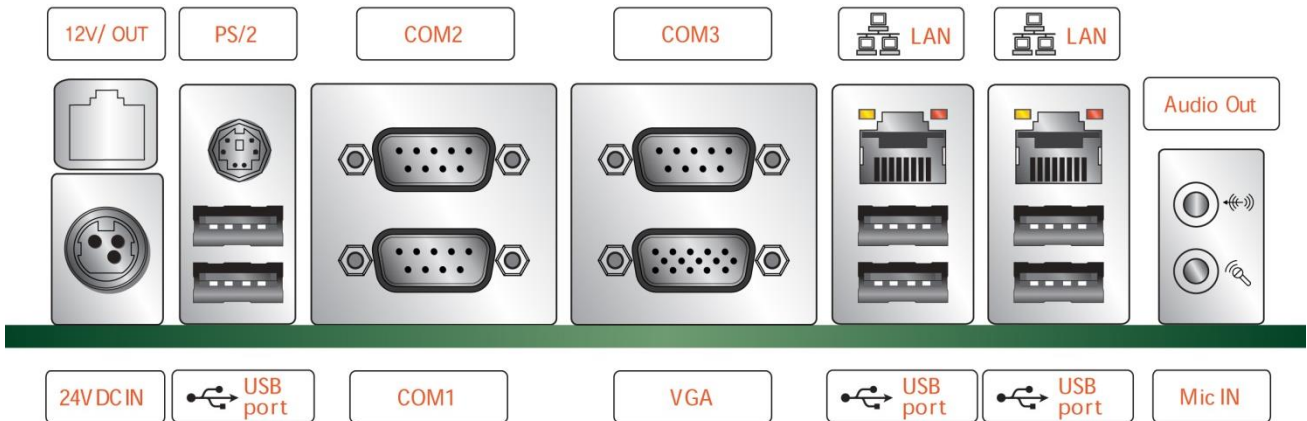
* I/O ports may differ according to product model or options.

I/O view

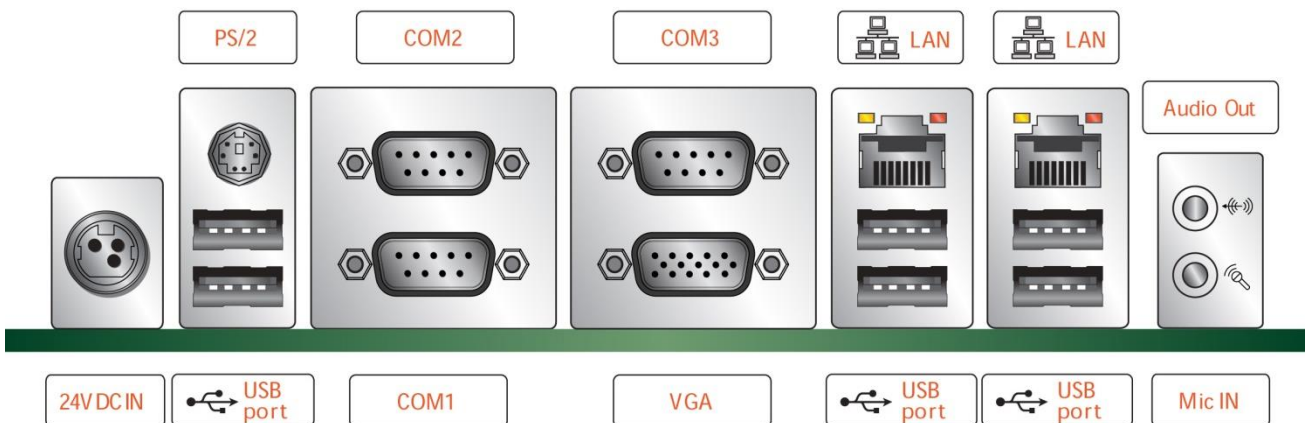


1. Raise the main display unit.
2. Pull the bottom and lift up the I/O port cover.

Standard I/O port - Domestic demand

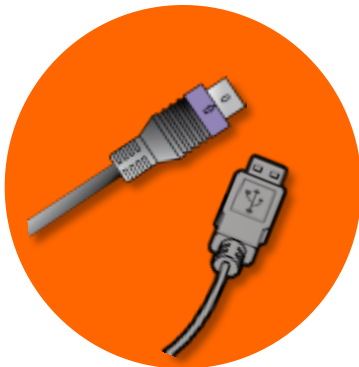
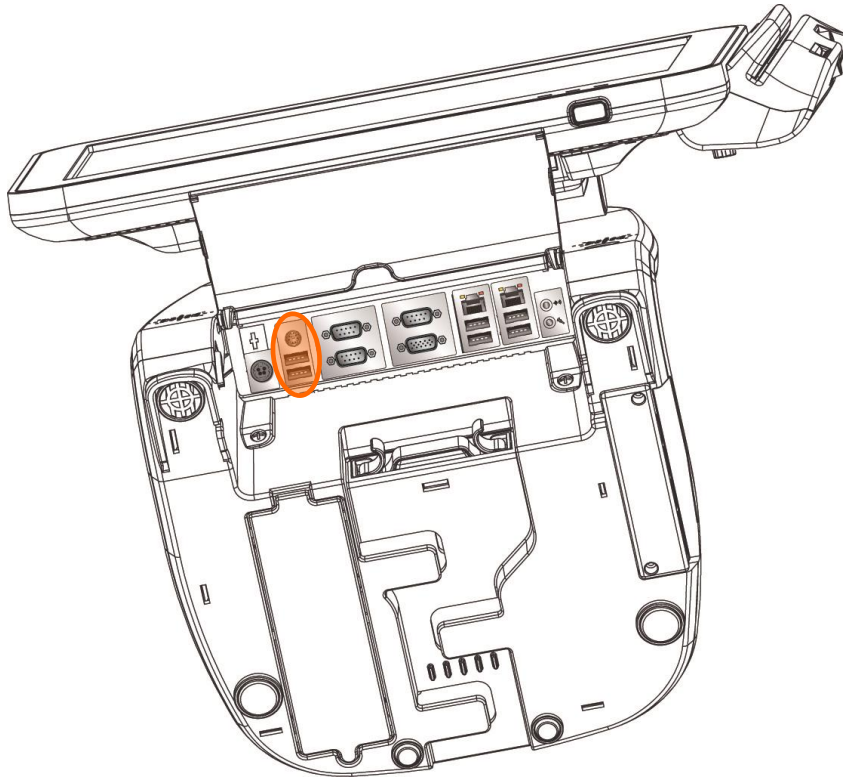


Standard I/O port - Export



(6) Setting up: Keyboard & Mouse Connection

Connecting the keyboard to the PS/2 port on the bottom panel.
or connecting the USB type keyboard and mouse to the USB port on the bottom panel.



(7) Setting up: Connection USB Port

USB ports are provided in the POS unit, two at the rear I/O and four at the side, all of which support the standard USB 2.0.

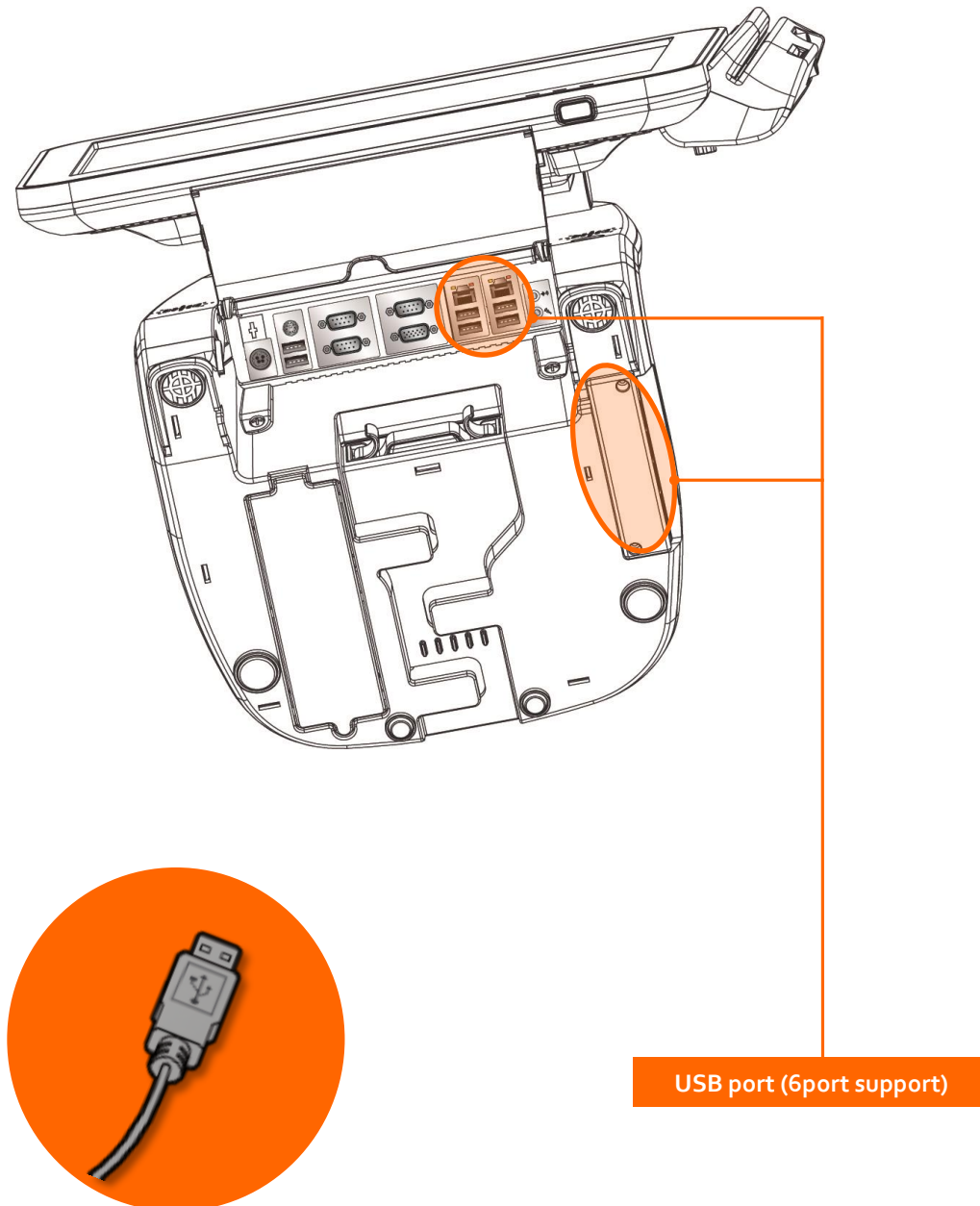
Some USB devices (optional devices) are only functional with specific driver software installed.

If multiple USB devices are used together, this may result in abnormal functionality.

Using a USB hub with external adapter for supplying power is recommended.

Dependent on the type of device, it is possible for the USB device to be recognized later than normal.

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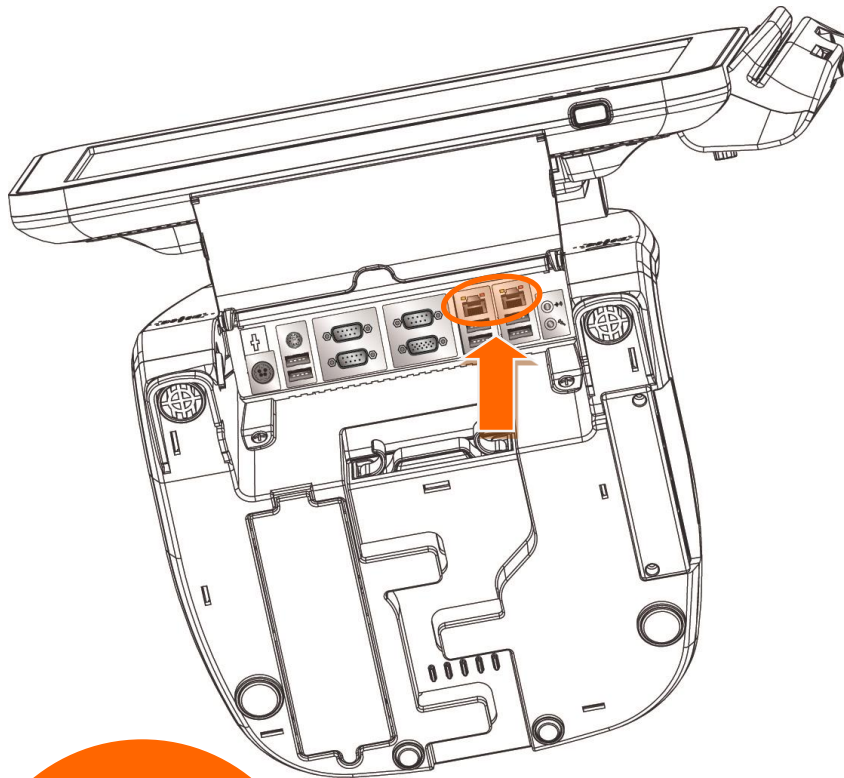



(8) Setting up: Connection via Ethernet Port (LAN)

The Ethernet port located at the rear I/O supports 10/100/1000Mbps using an RJ45 connector cable. When connected properly, the LAN LED light will be switched on.

Through a network hub.

Refer to the table below for the LAN port LED indications.

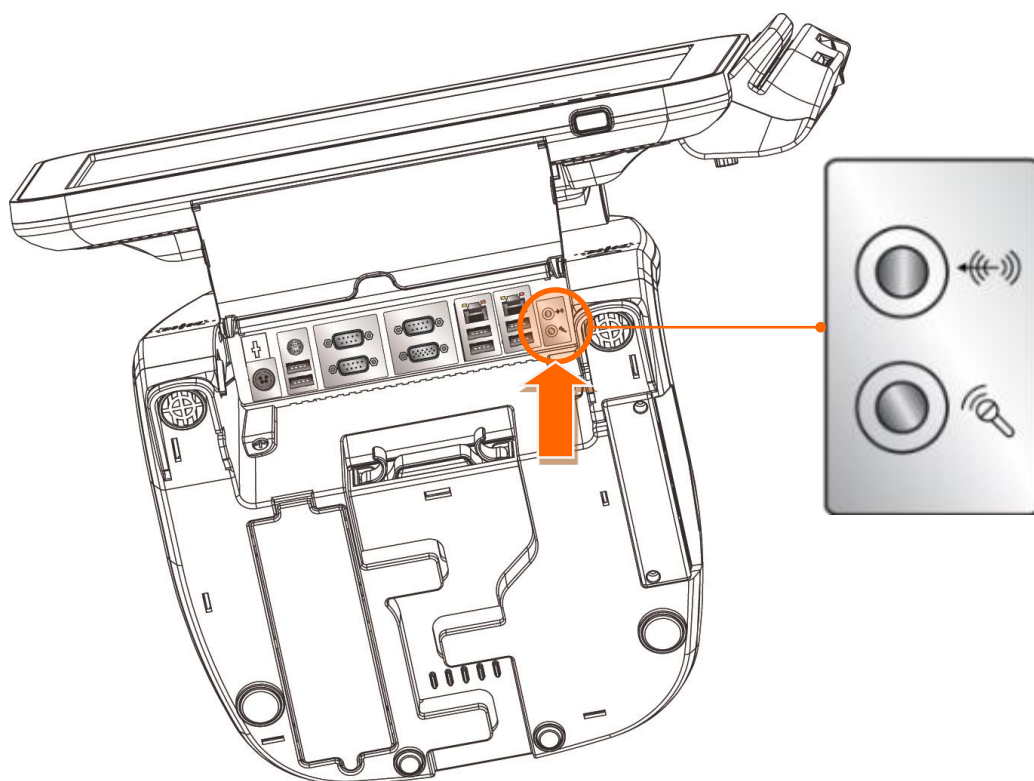


	LINK / ACT LED		SPEED LED	
	Status	Description	Status	Description
	OFF	No link	OFF	10Mbps connection
	YELLOW	Linked	ORANGE	100Mbps connection
	BLINKING	Data activity	GREEN	1Gbps connection

(9) Setting up: Line-out, Mic-in, Line-in connection

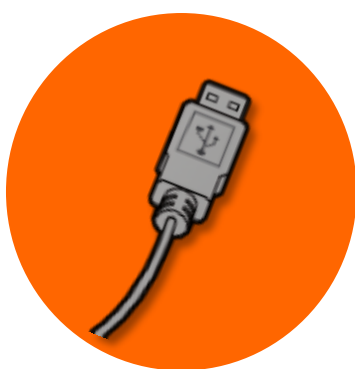
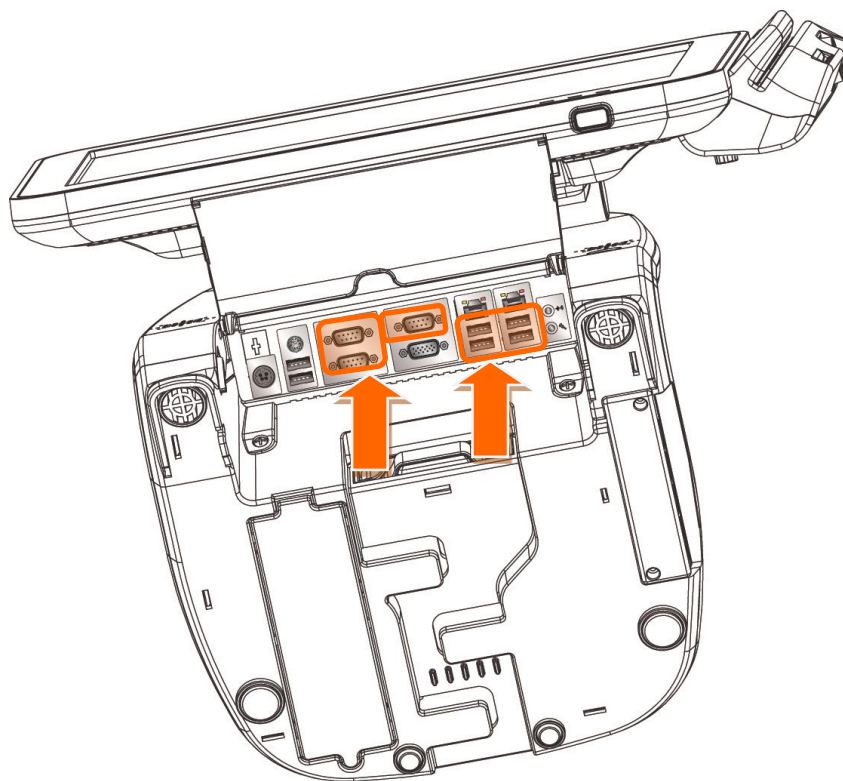
- **Line In port (light blue):** This port connects a tape, CD, DVD player, Sources.
- **Line Out port (lime):** This port connects a headphone or a speaker. In 4-channel, 6-channel and 8-channel configuration, the function of this port becomes Front Speaker Out.
- **Microphone port (pink):** This port connects a microphone.

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(10) Setting up: Printer Connection

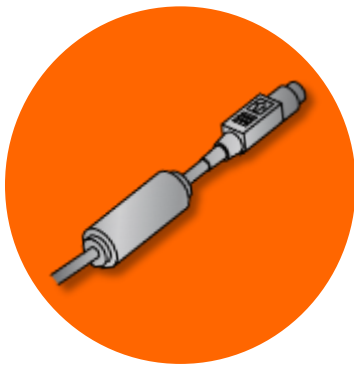
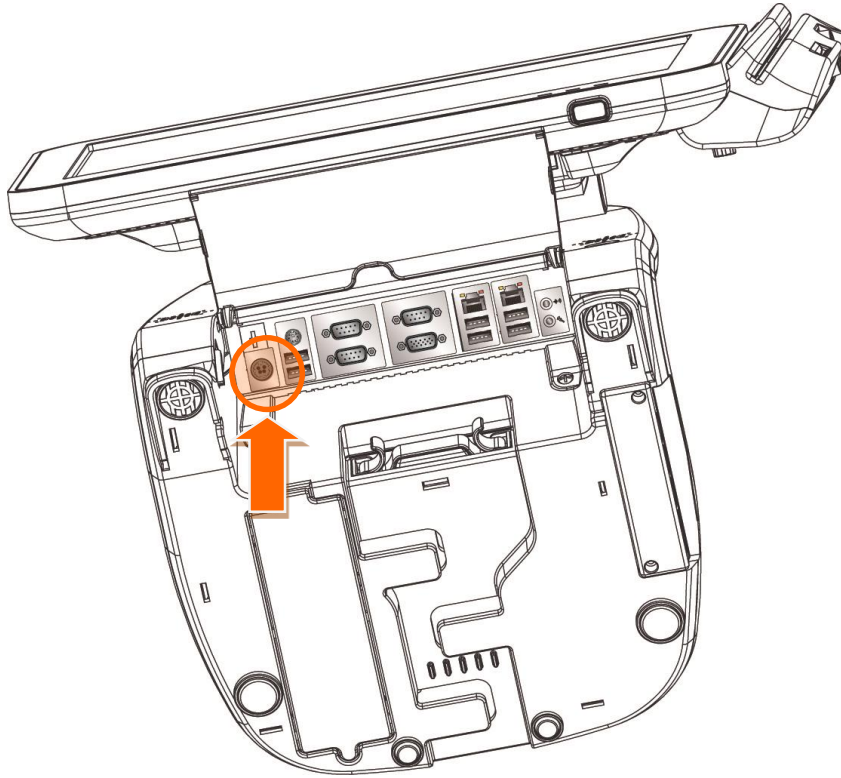
Connect printer cable to either Serial & USB port as required.



(11) Setting up: Power Cable Connection

The 'ANYSHOP e2 D25' POS system is equipped with a 12V/ 5A power adaptor. Connect the cable to the DC-IN port on system IO panel.

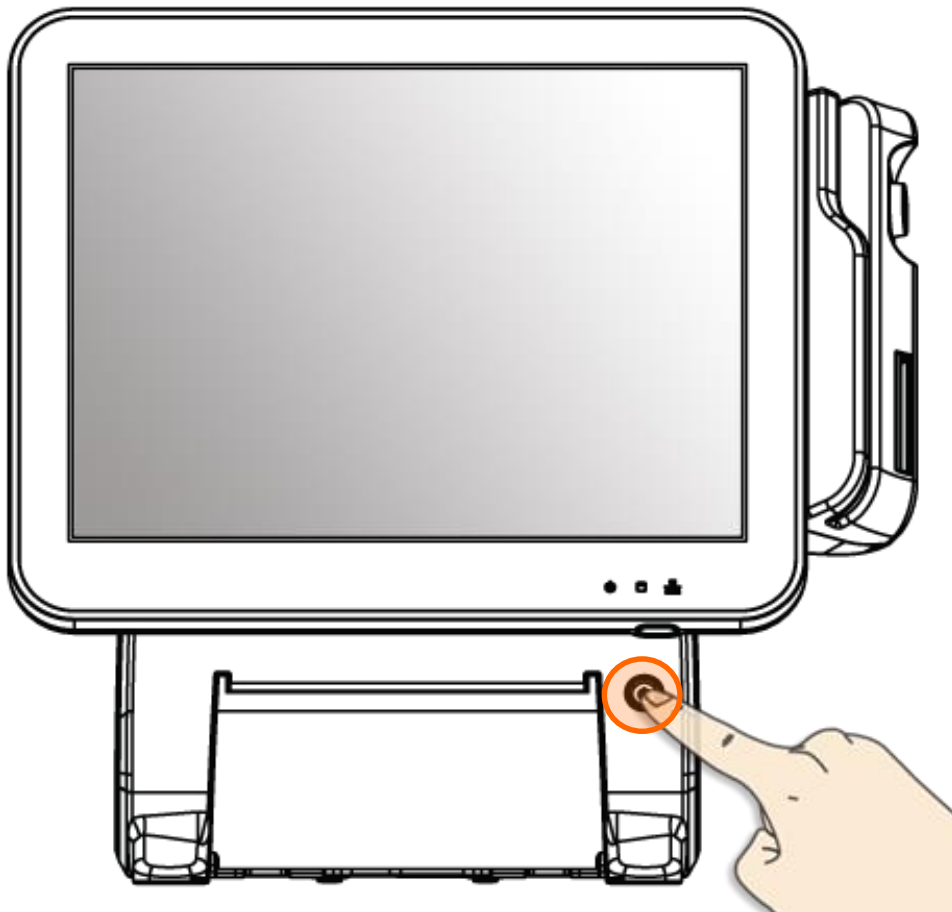
26



CAUTION : Do not pull on the adaptor cable! Disconnect cable with pulling the plug cap.

(12) Switching On POS

1. Press POWER button on the POS unit. (POWER LED will light up.)
The power switch is located right hand side of the main body under the display unit.
2. Confirm that Windows loads correctly.



(13) Shutting Down POS

* For product stability, we recommend closing Windows from the O/S. Please make sure that you have closed all applications before closing Windows.

1. Click 'Start' and select 'Turn off Computer'
2. Click 'Shut Down' to close Windows.

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(ex: POSReady2009 or Windows XP)



(14) System Drivers

Please visit our website: www.posbank.com for the latest driver updates.

Supported devices: Cash drawer, CDP (Customer Display Panel), MSR (Magnetic Stripe Reader) and printer.

Driver installation

- **Installation method :**

Driver will automatically install by clicking SETUP.EXE in your driver CD.

If you require any help with installing or using our OPOS system, please contact our customer service center.

- **Folder of contents of POS terminal installation driver:**

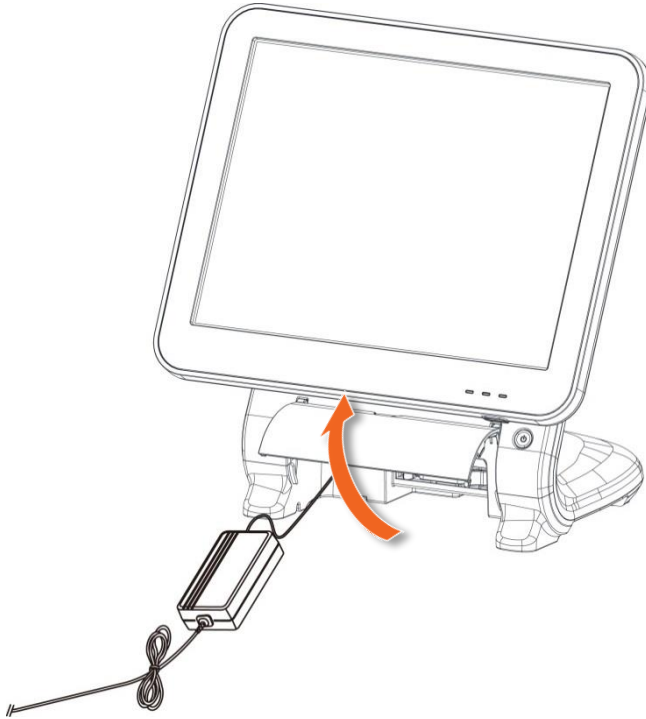
1. CHIP SET DRV installation
2. VIDEO (VGA) DRV installation
3. TOUCH DRV installation
4. AUDIO DRV installation method
5. LAN DRV installations
6. AMT & ME Driver installation
7. User's Manual, Installation guide

2. ANYSHOP e2 Qs Module POS System Replacement

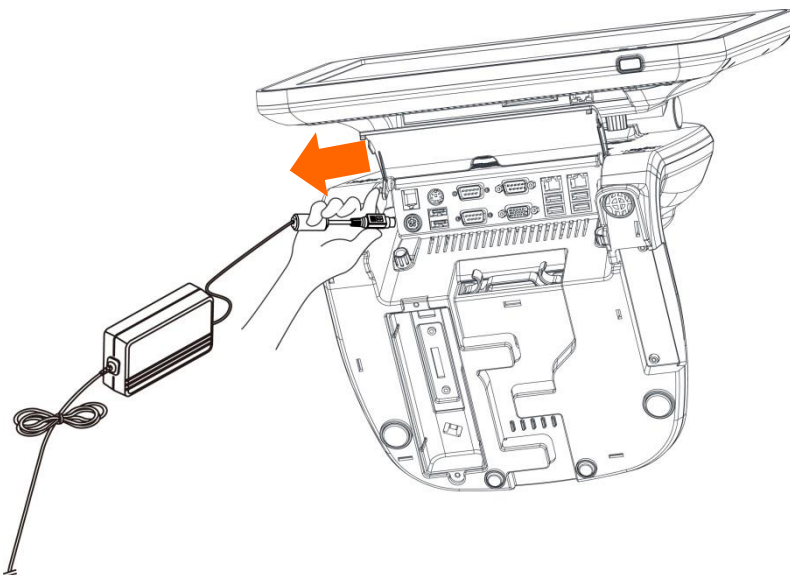
(1) Separating LCD monitor module

LCD monitor module

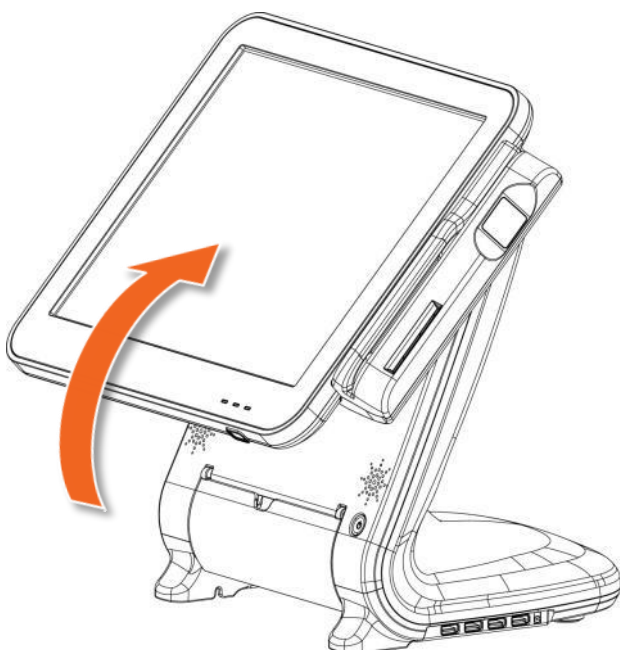
30



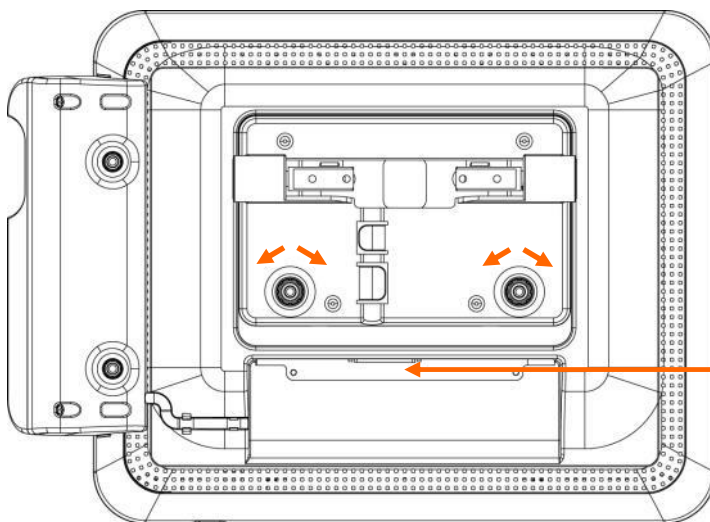
Step1. Please lift up the I/O cover



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Lift up the LCD monitor.



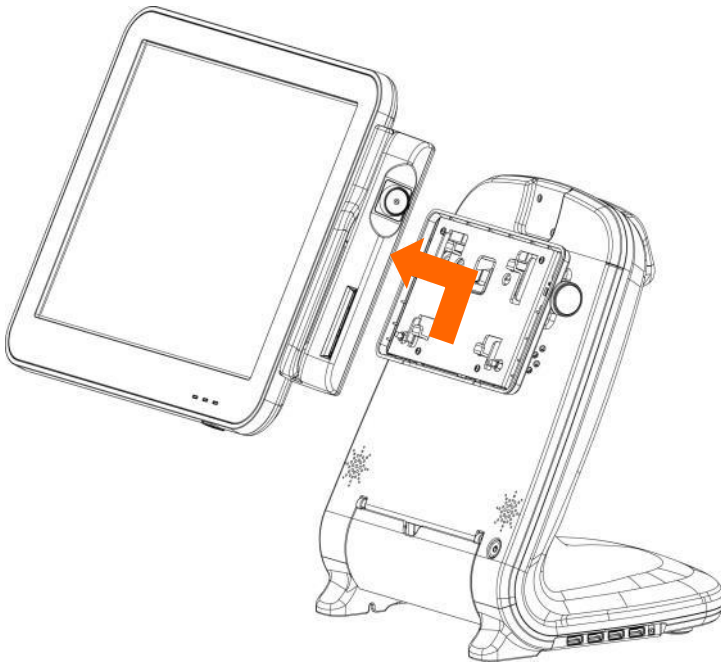
Step4. Turn the 2 hand-screws to “open” direction.

Step5. Remove the monitor cable.



LCD monitor module

32



Step6 Lift up the LCD monitor module and detach from the main body.

Step7. Separate LCD monitor module.

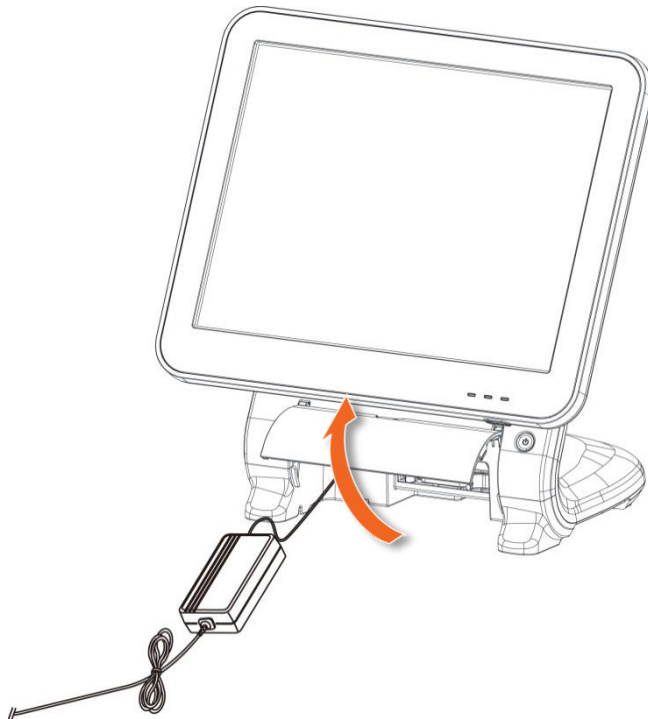


Step8. LCD monitor module is now Replacement.

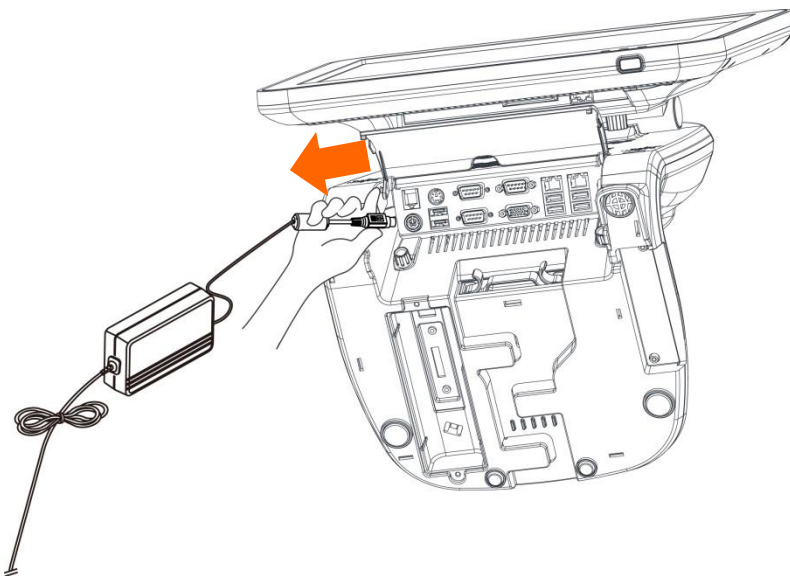
(2) Separating Hinge module

HINGE module

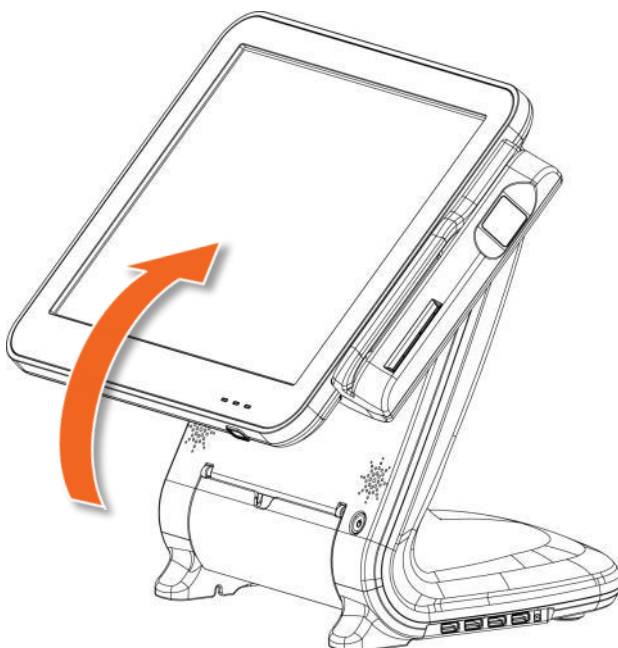
33



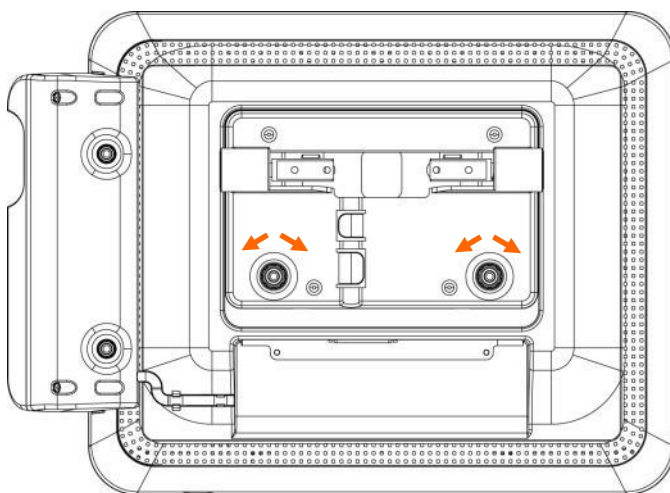
Step1. Please lift up the I/O cover



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



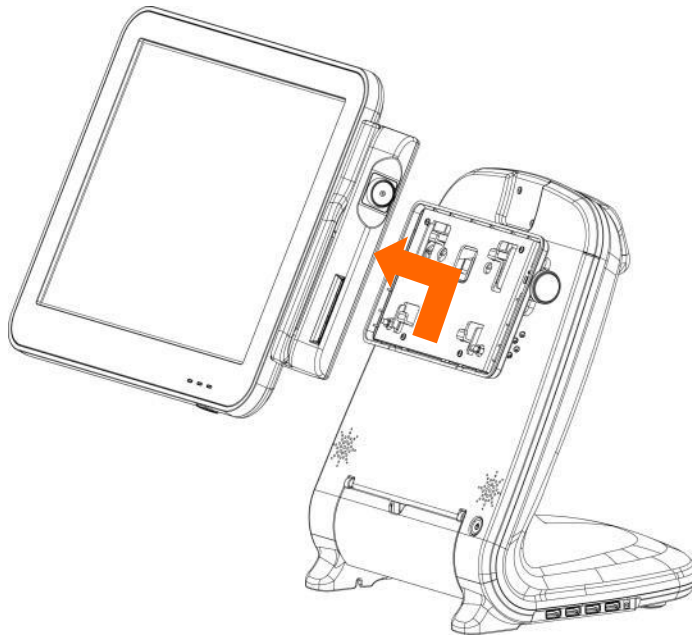
Step3. Lift up the LCD monitor.



Step4. Turn the 2 hand-screws to “open” direction.

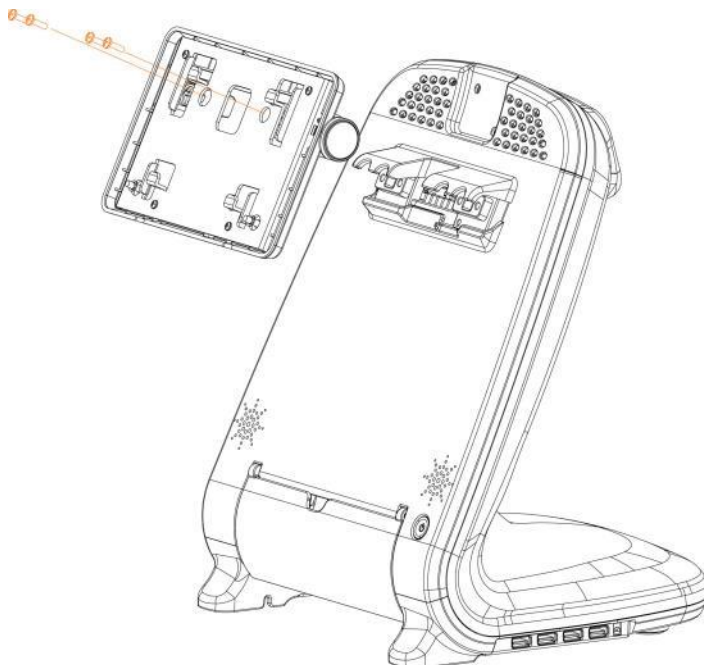
Step5. Remove the monitor cable.





Step6 Lift up the LCD monitor module and detach from the main body.

Step7. Separate LCD monitor module.

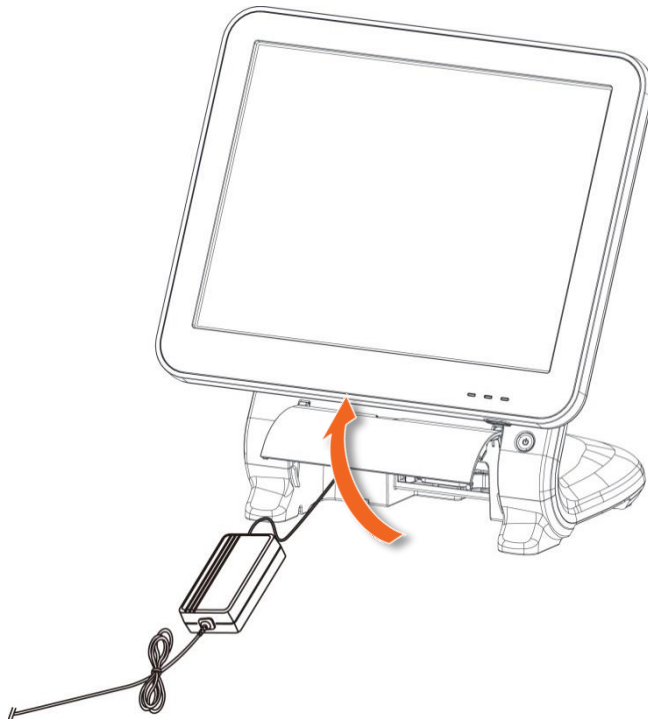


Step8. Remove the 4 screws.

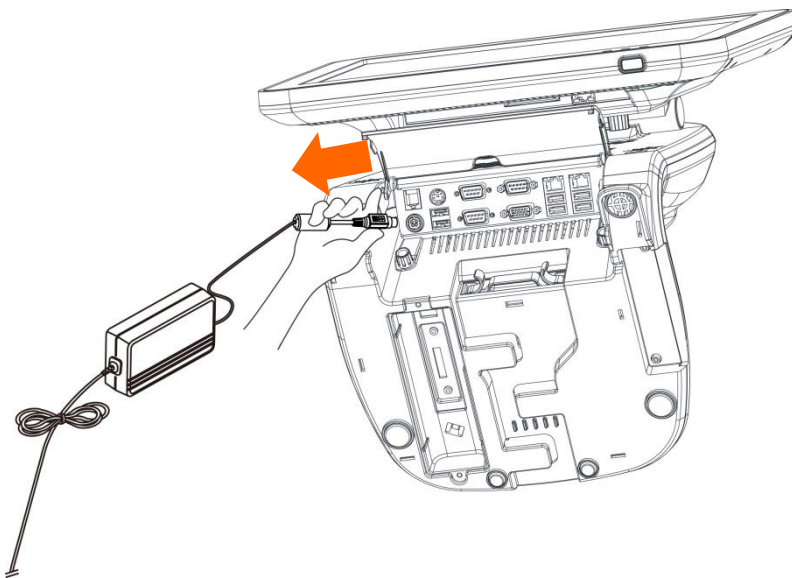
Step9. Separate the hinge module.

(3) Separating Back cover

Back cover



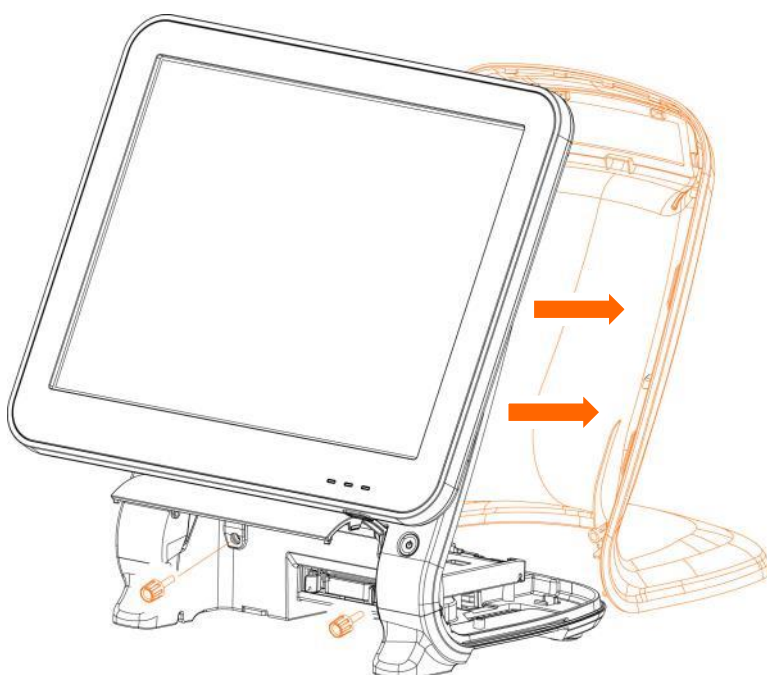
Step1. Please lift up the I/O cover



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.

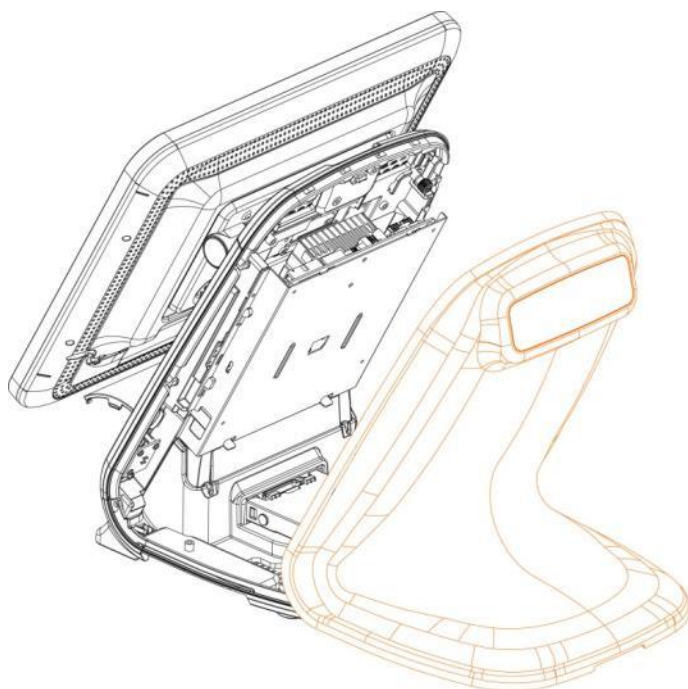
Back cover

37



Step3. Remove the 2 screws on front

Step4. Remove the Back cover pushing it outward.

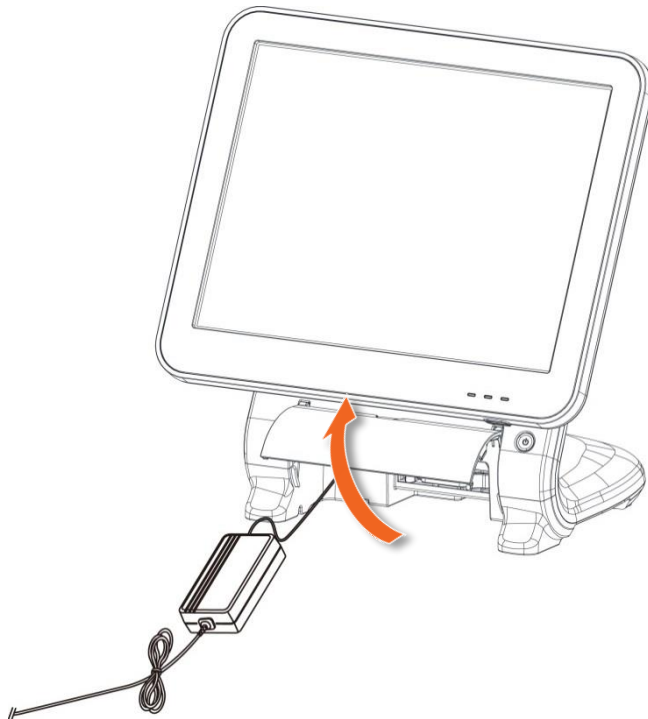


Step5. Separate the Back cover.

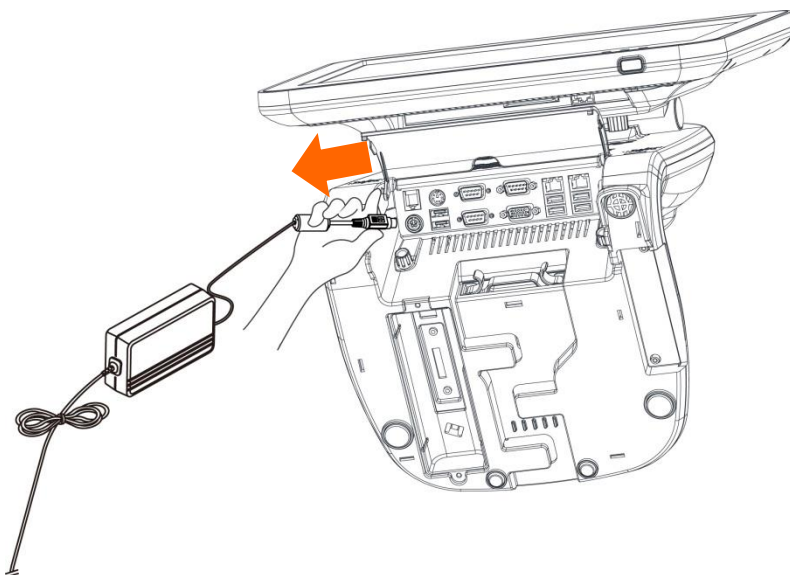
(4) Separating Motherboard

** Warning: Completely remove power cable when opening main unit or installing optional devices.*

Motherboard



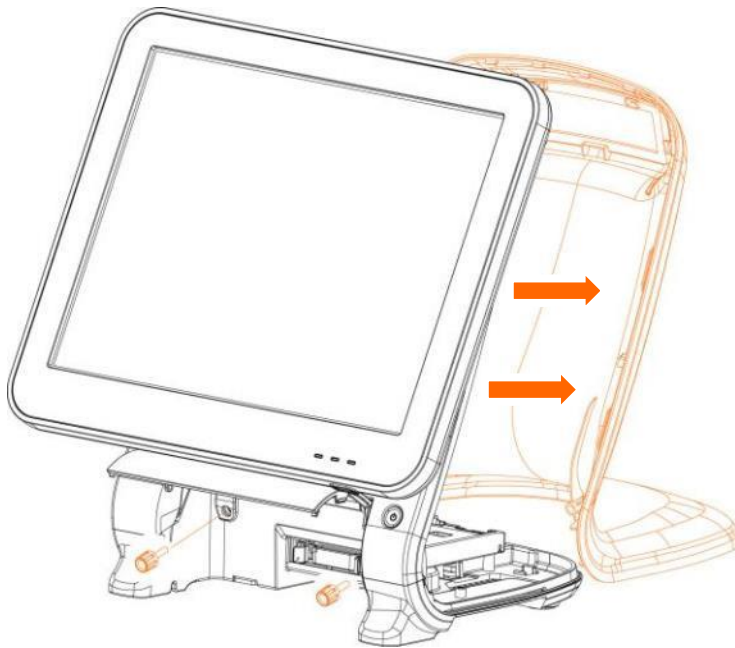
Step1. Please lift up the I/O cover



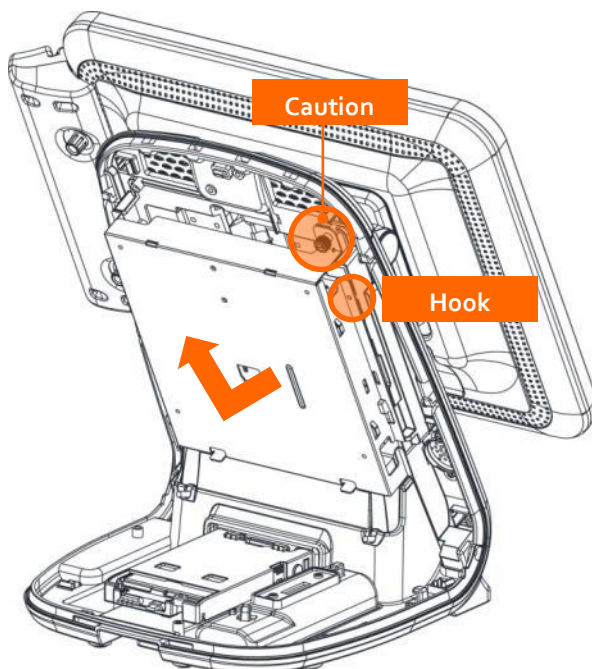
Step2. Remove the adapter cable.
Disconnect cap from base of Unit.

Separating Motherboard

39



Step3. Separating Back cover.

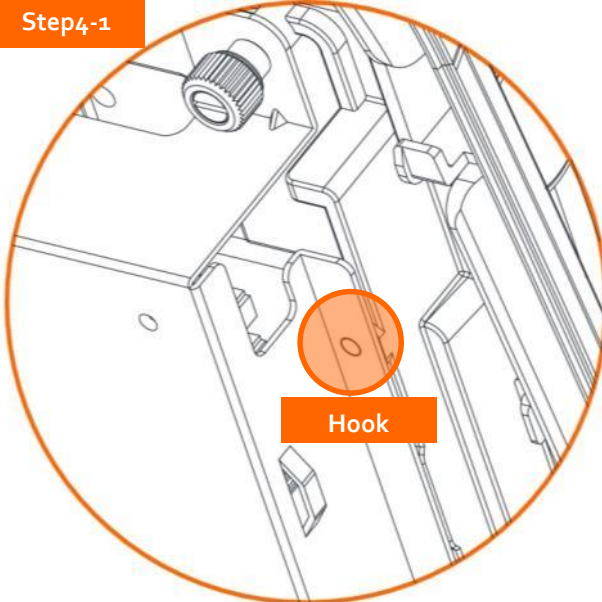


Step4. Turn hand screw and remove Mother board Bracket. (Pull and lift up)

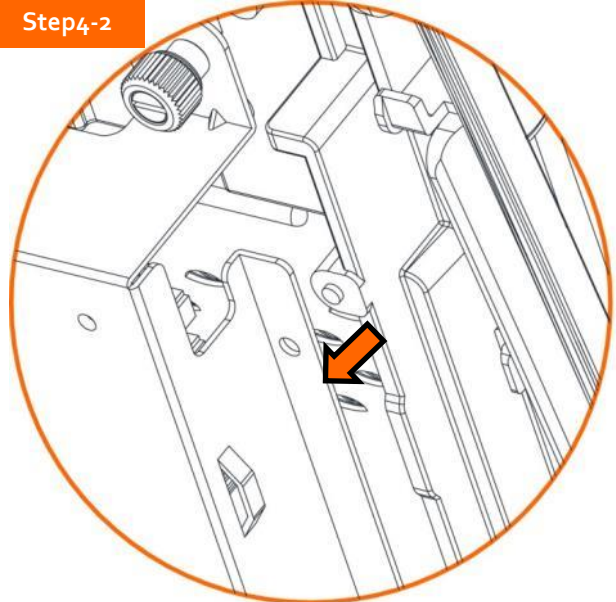
Caution : Look at the frame hook before pull and lift up.

Zoom in

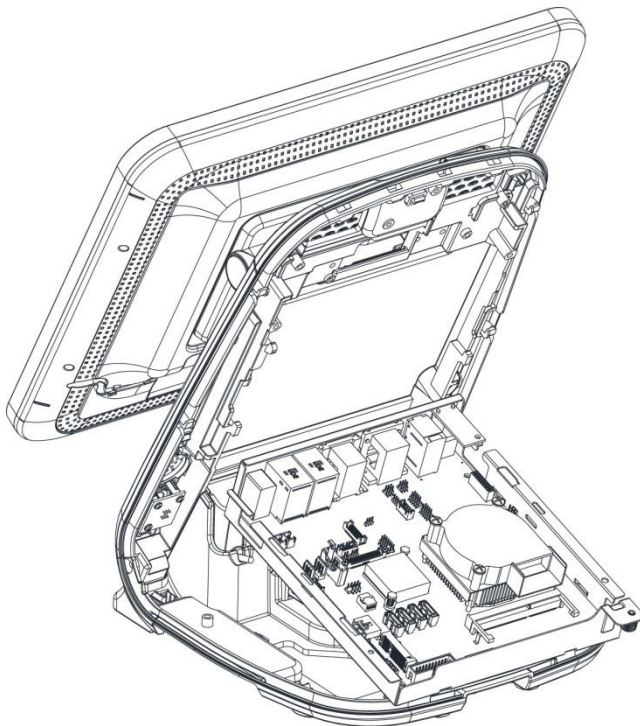
Step4-1



Step4-2



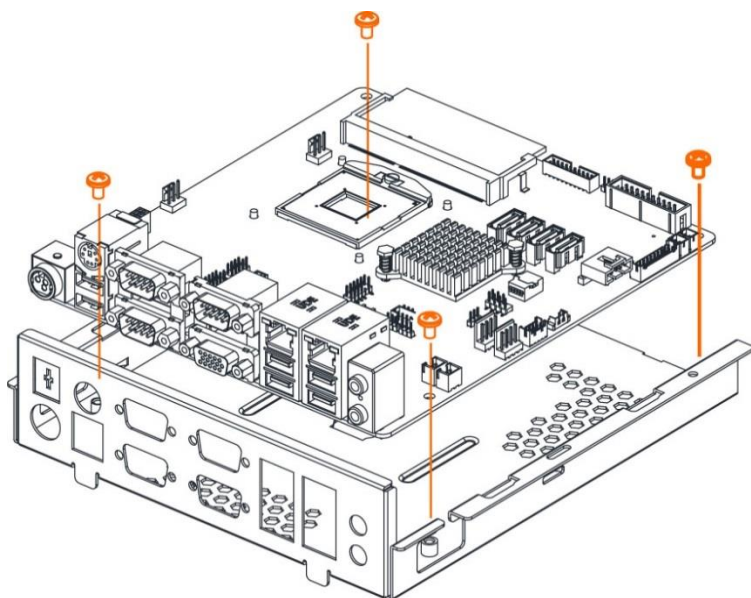
Caution : Look at the frame hook before pull and lift up.



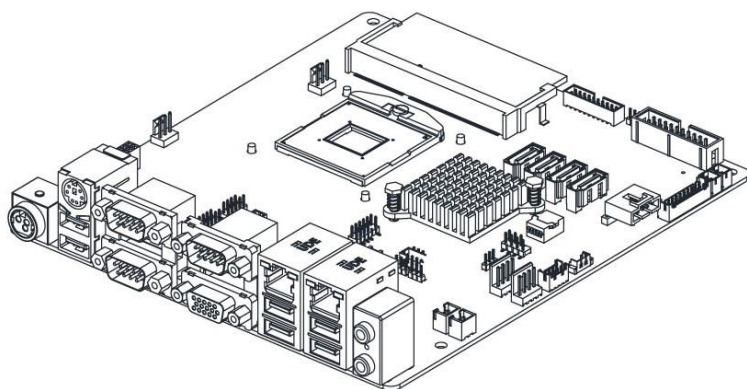
Step5. Remove the cables

Separating motherboard

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Step 6. Remove the 4 screws.



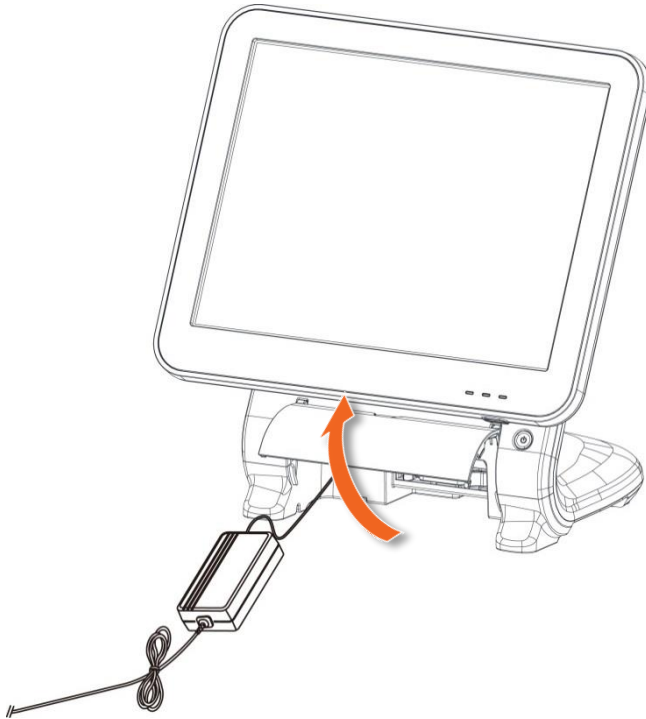
Step 7. Replace the motherboard.

(5) Separating SSD&HDD

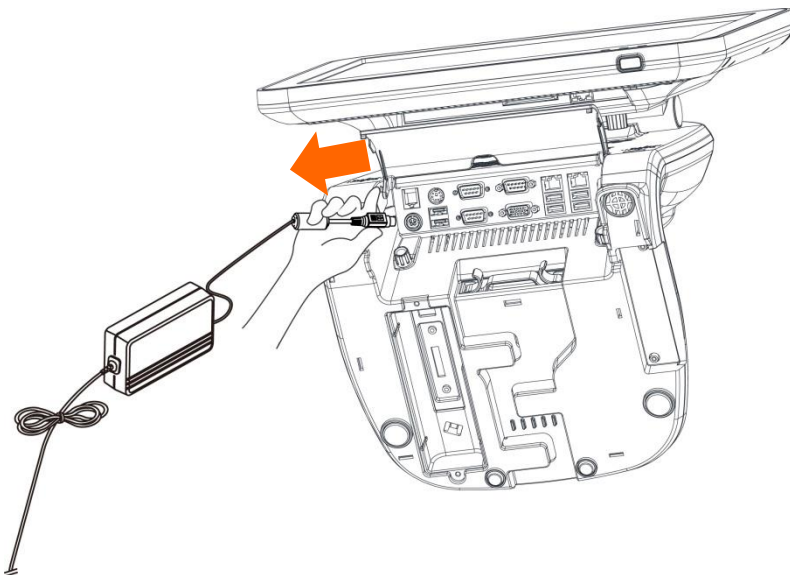
* Warning: Completely remove power cable when opening main unit or installing optional devices.

SSD&HDD

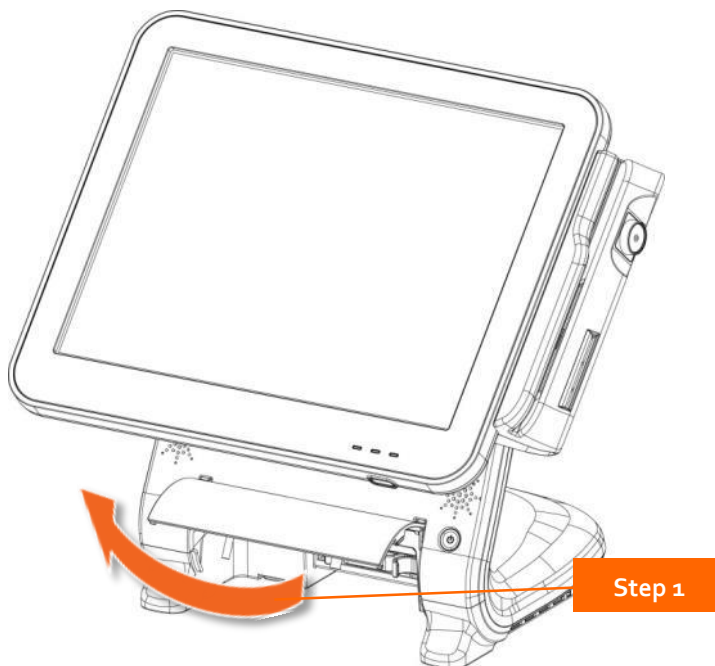
42



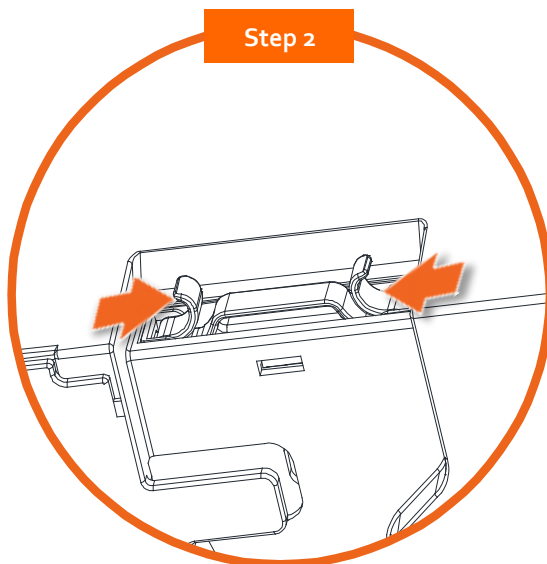
Step1. Please lift up the I/O cover



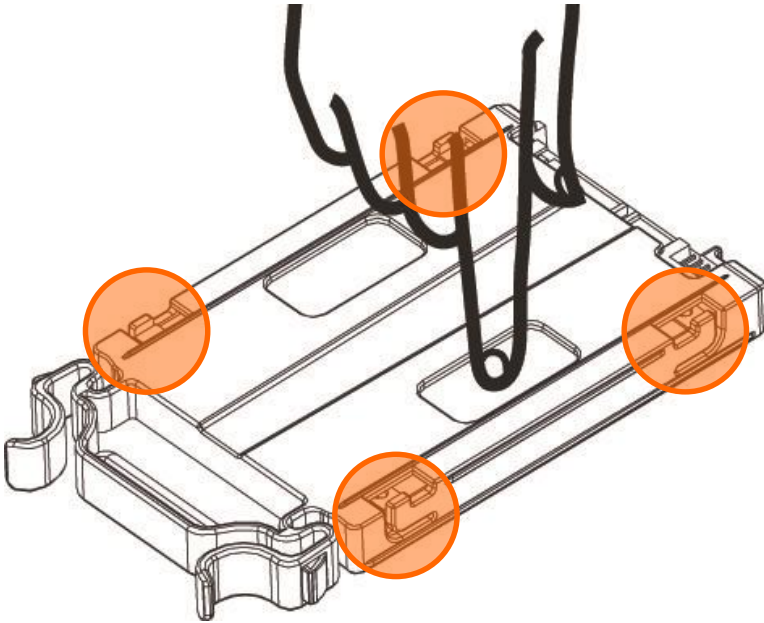
Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Raise the main LCD monitor Module.
Pull the bottom and lift up the I/O port cover.

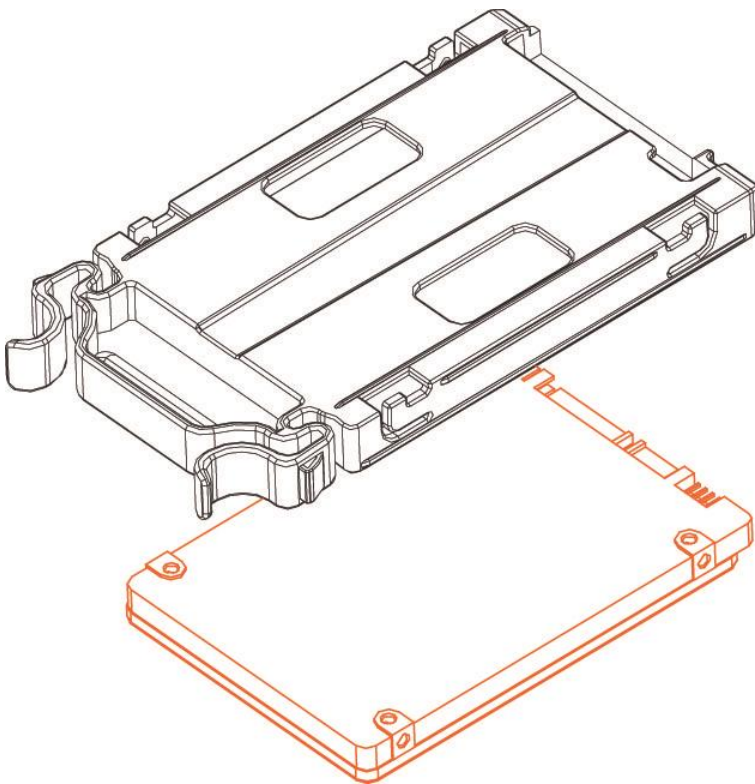


Step4. Pull out HDD Tray by pressing
the grip.



Step5. Open four Tray hinges carefully in opposite directions as in image.

Step6. SSD will be separated smoothly.



Step7. Assemble SSD bottom to join Tray bottom.

Caution: Power must be disconnected before replacing SSD.

Before replace the device, remove static electricity of technician.

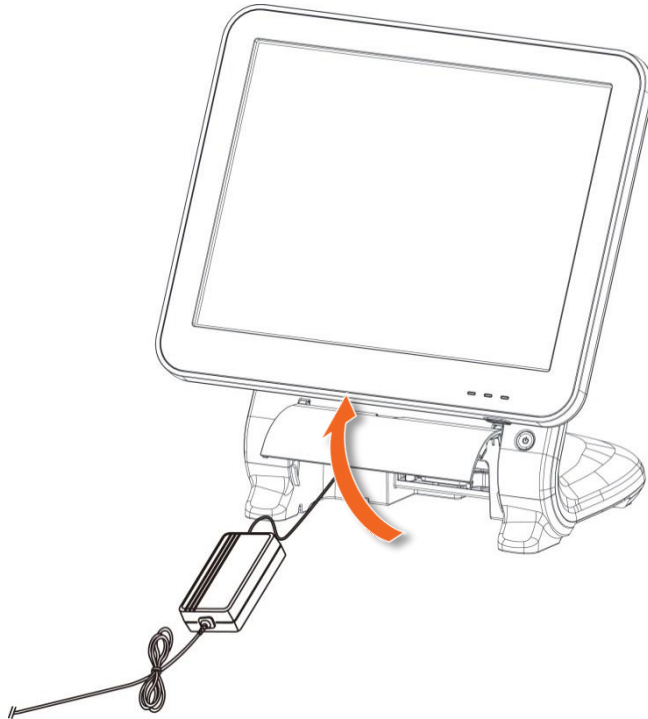
3. Installation of Optional Devices - Option

* Warning: Completely remove power cable when opening main unit or installing optional devices.

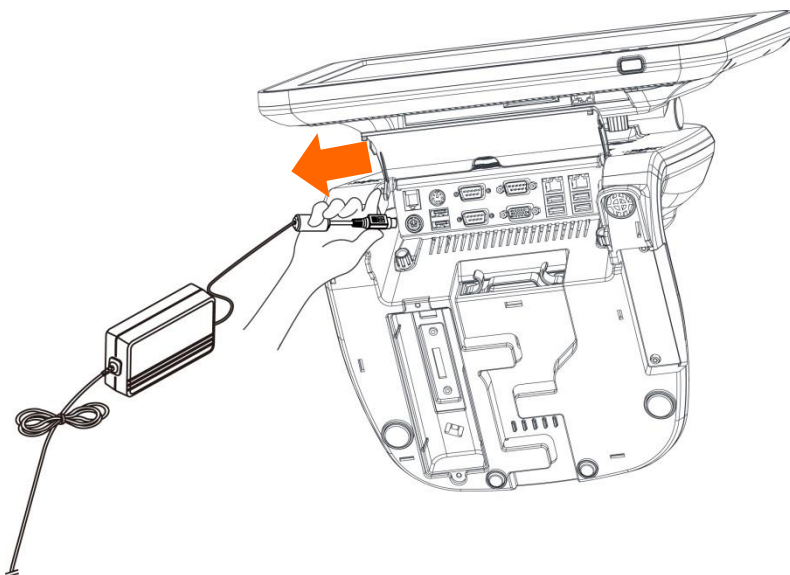
(1) LCD module – Option

LCD monitor module

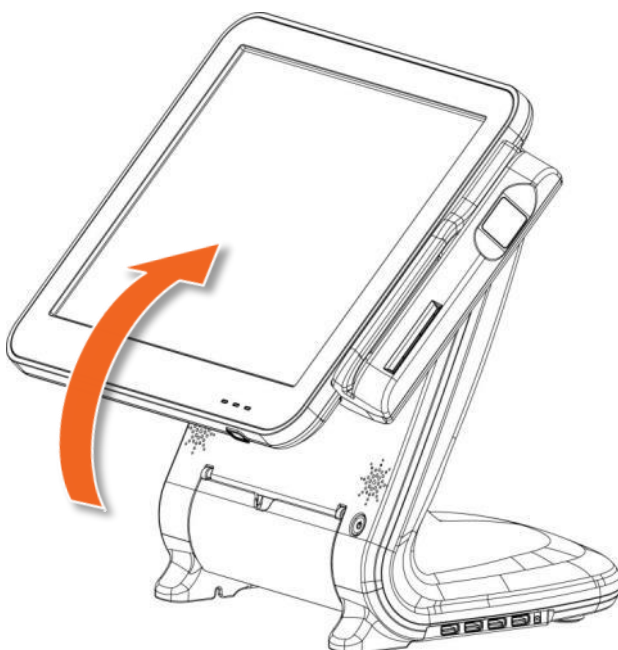
45



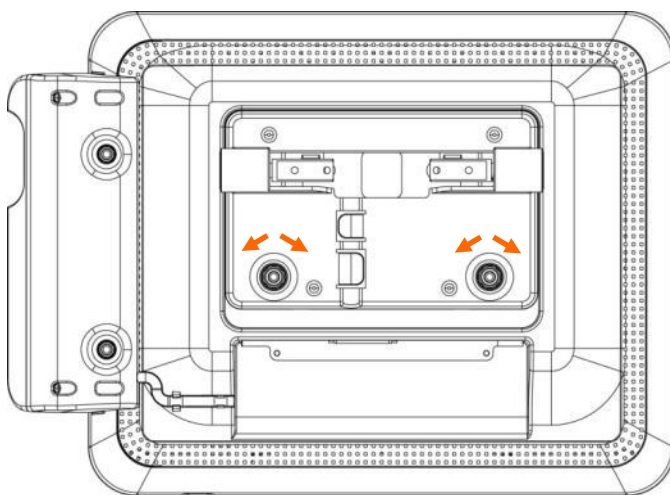
Step1. Please lift up the I/O cover



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



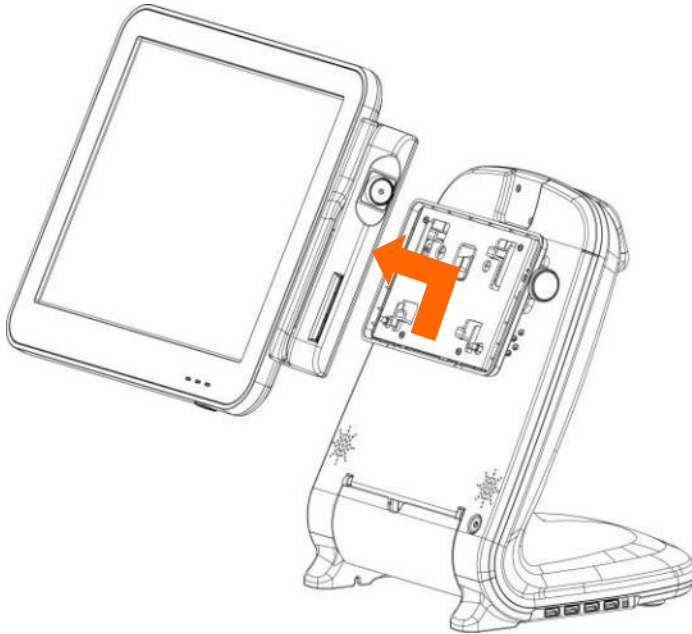
Step3. Lift up the LCD monitor.



Step4. Turn the 2 hand-screws to "open" direction.

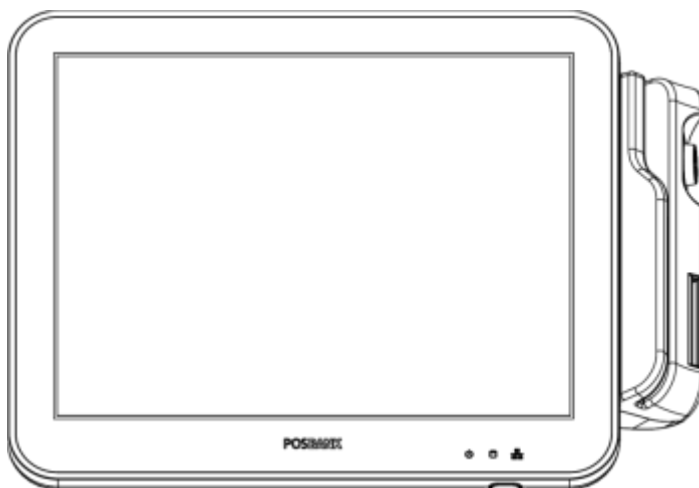
Step5. Remove the monitor cable.





Step6 Lift up the LCD monitor module and detach from the main body.

Step7. Separate LCD monitor module.

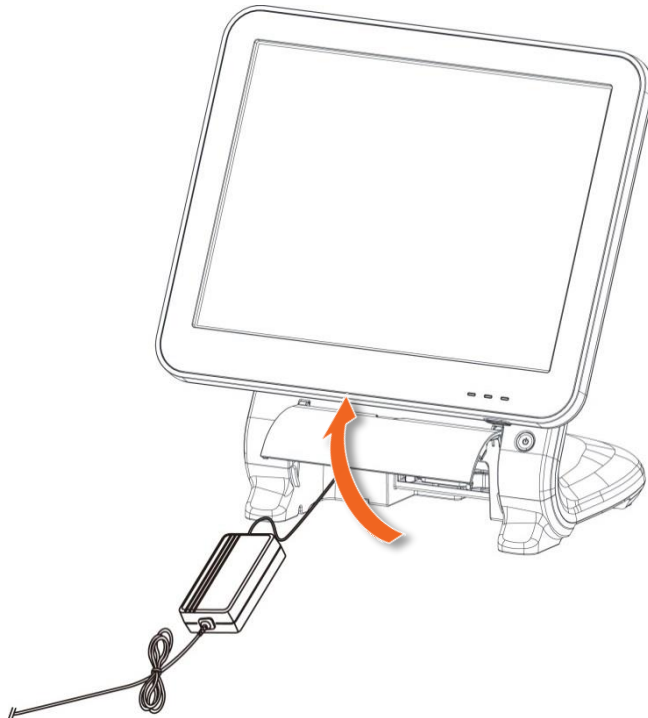


Step8. LCD monitor module is now Replacement.

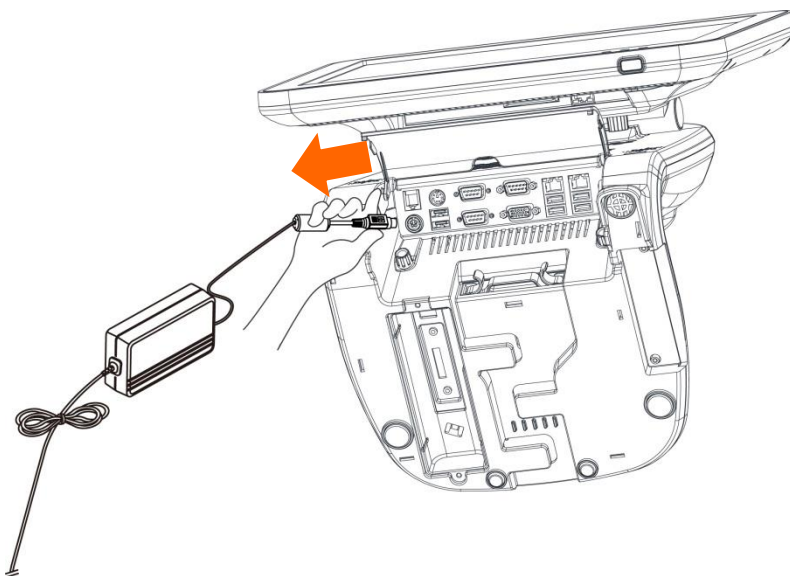
(2) CDP module – Option / Domestic demand

** Warning: Completely remove power cable when opening main unit or installing optional devices.*

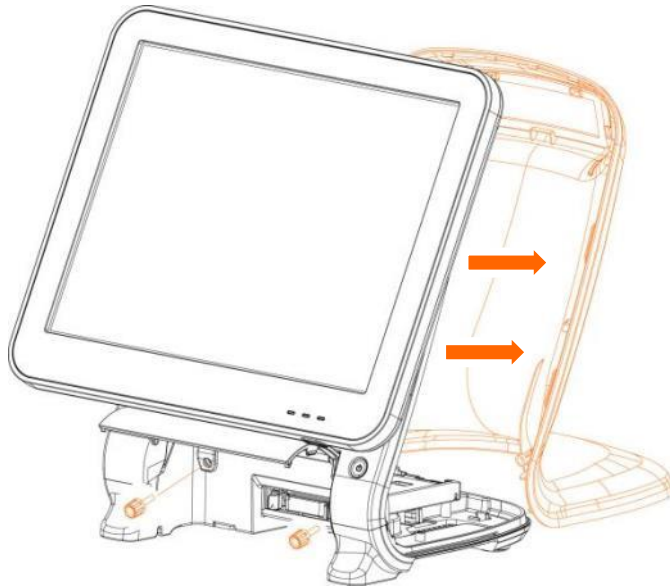
CDP-Option



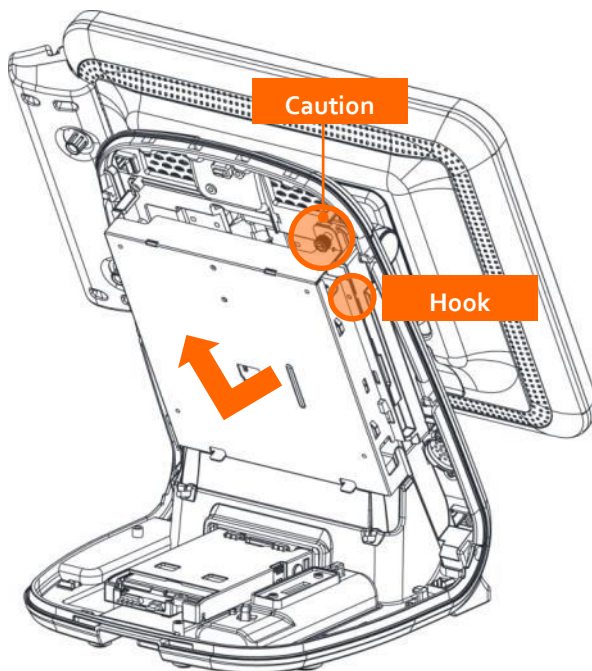
Step1. Please lift up the I/O cover.



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Separating Back cover.

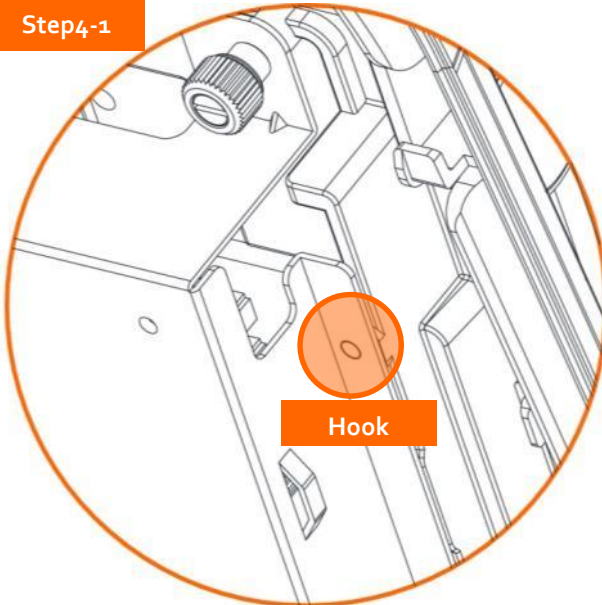


Step4. Turn hand screw and remove Mother board Bracket. (Pull and lift up)

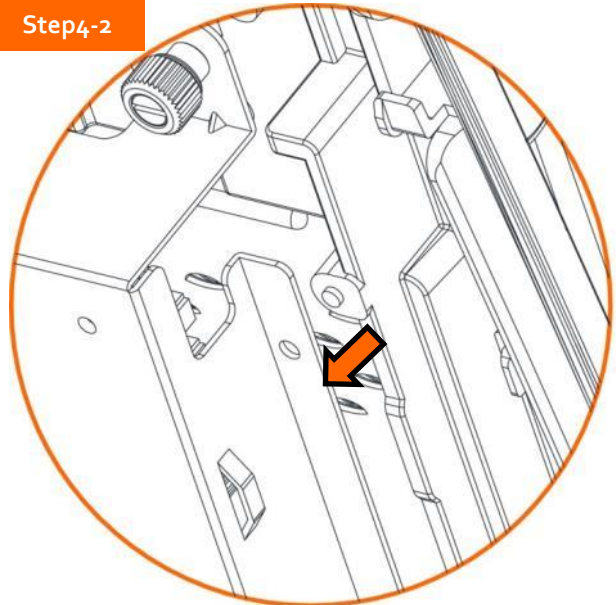
Caution : Look at the frame hook before pull and lift up.

Zoom in

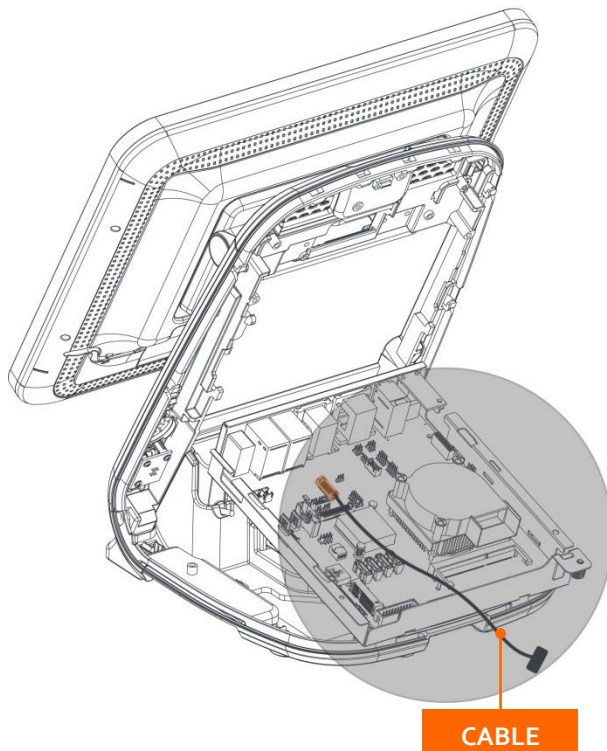
Step4-1



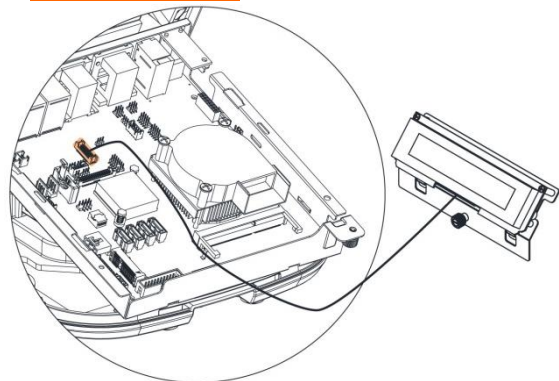
Step4-2



Caution : Look at the frame hook before pull and lift up.

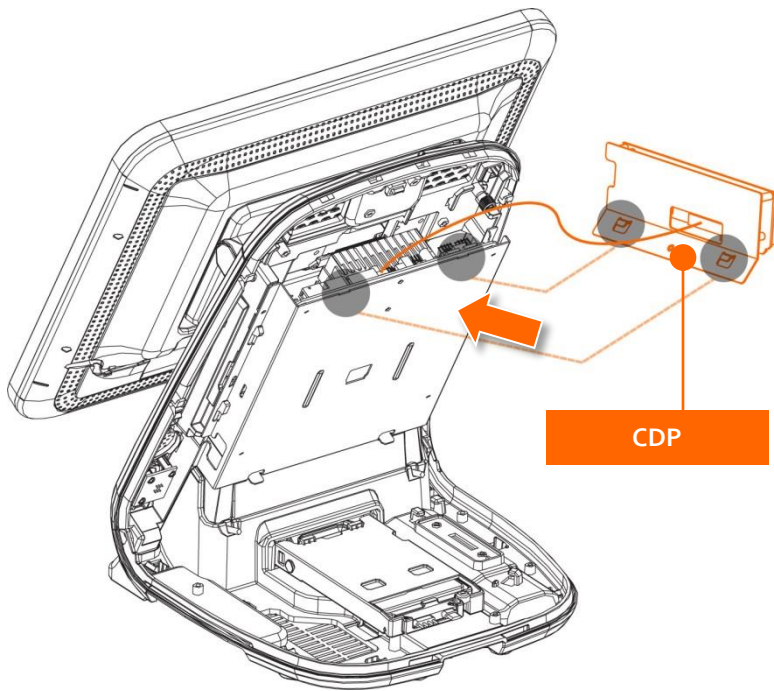


Zoom in

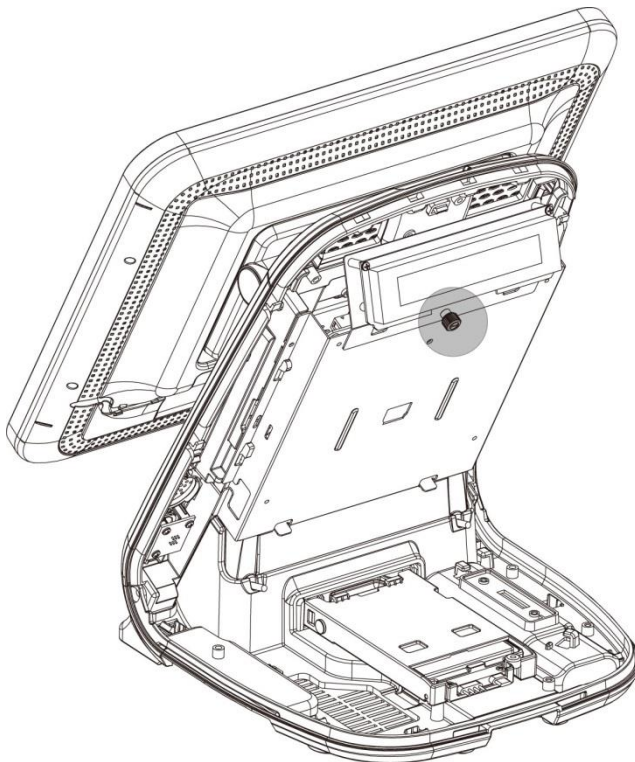


Step5. Put holes in the sample place.
(Image reference/VGA2 Port)

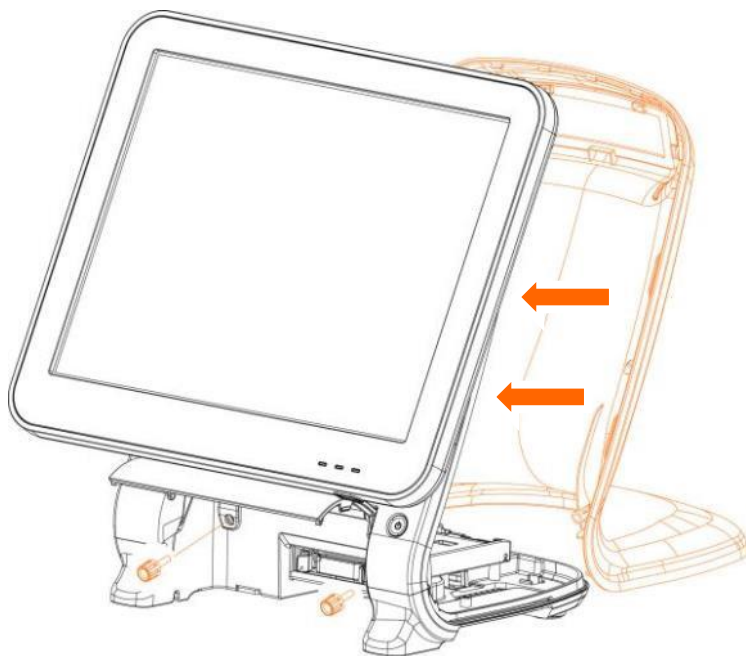
Step6. Reassemble Mother board
reverse procedure of 'Step4'.



Step7. Assemble the CDP module with the mother board bracket of the body.



Step8. Assemble CDP module to back of Mother board bracket by hand screw.



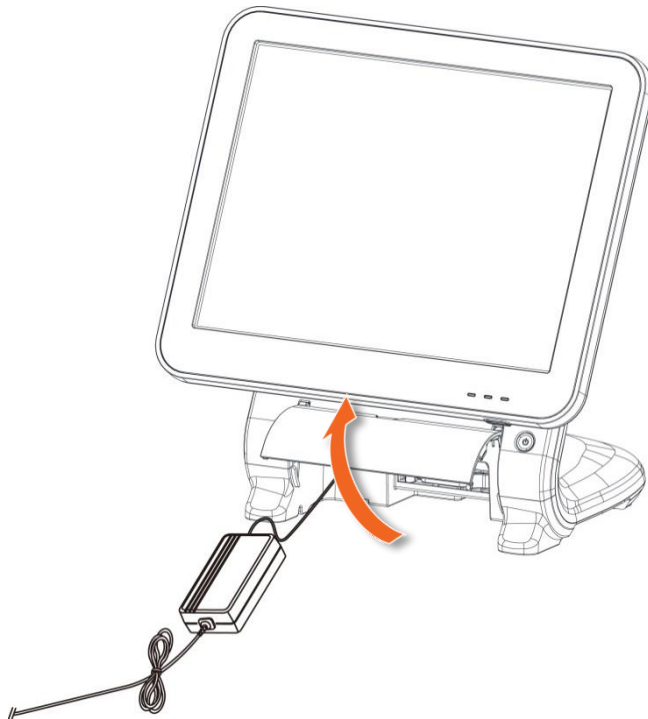
Step7. Reassemble back cover
procedure of 'Step1-4'.

(3-1) 2nd Display module –Option / Domestic demand

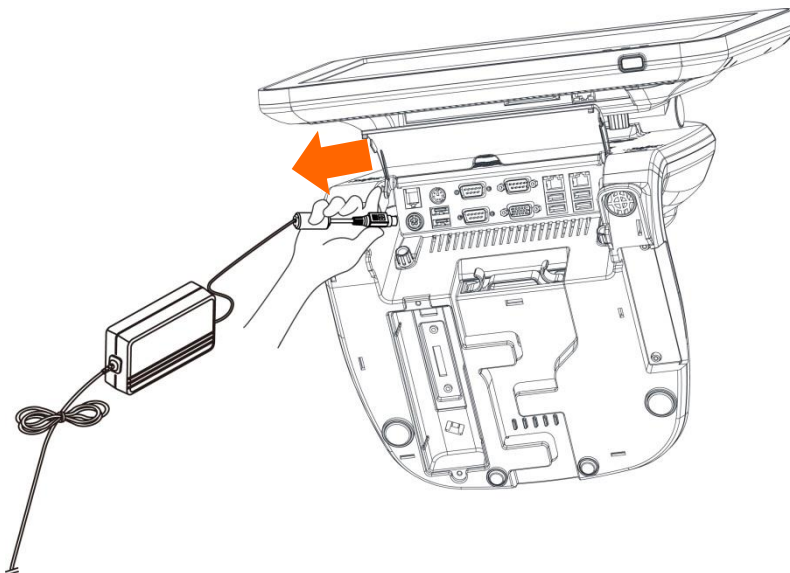
** Warning: Completely remove power cable when opening main unit or installing optional devices.*

2nd display(10.1, 12.1 inch monitor) – Option / Domestic demand

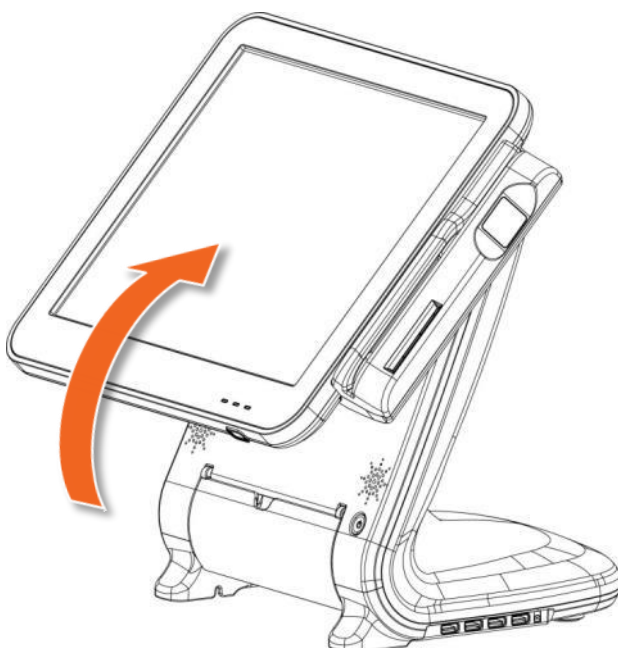
53



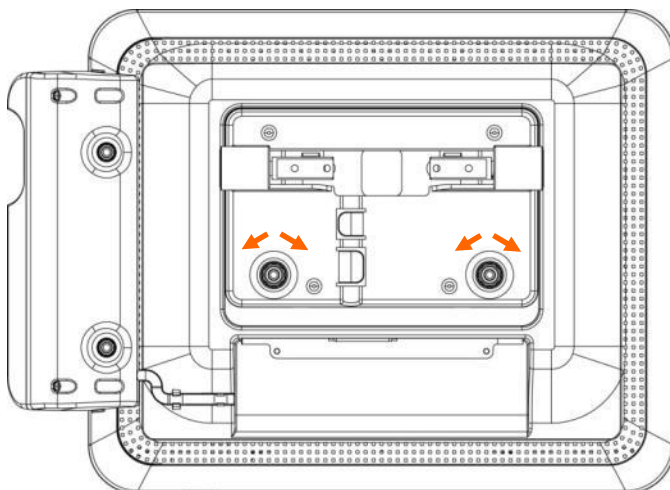
Step1. Please lift up the I/O cover.



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



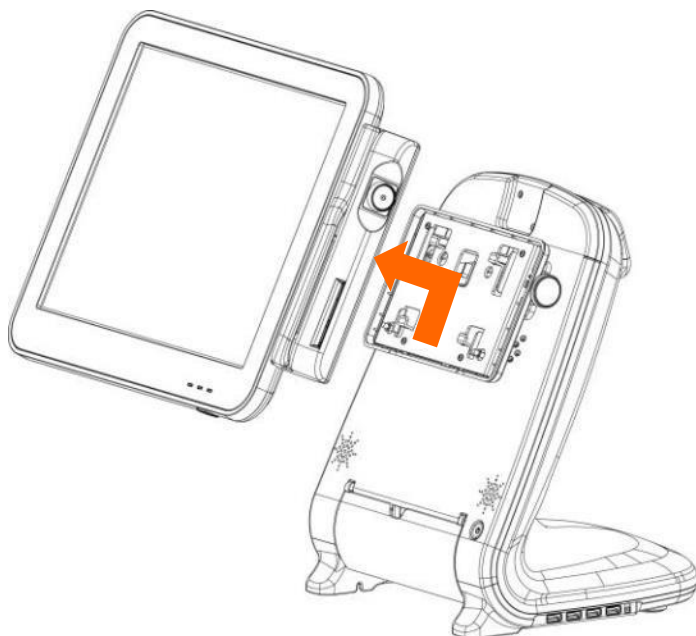
Step3. Lift up the LCD monitor.



Step4. Turn the 2 hand-screws to “open” direction.

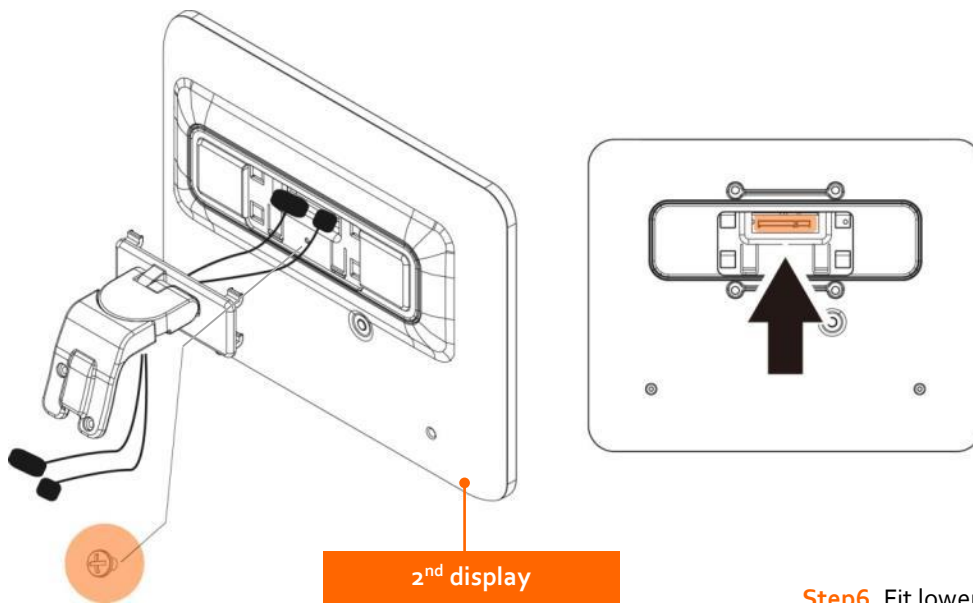
Step5. Remove the monitor cable.





Step6 Lift up the LCD monitor module and detach from the main body.

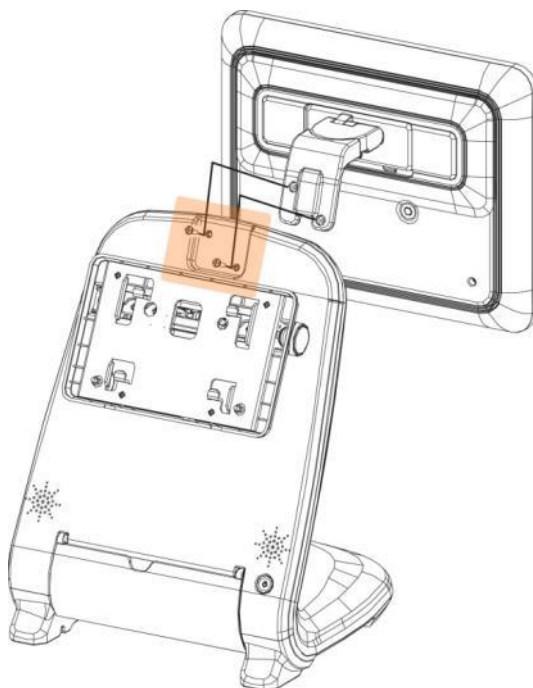
Step7. Separate LCD monitor module.



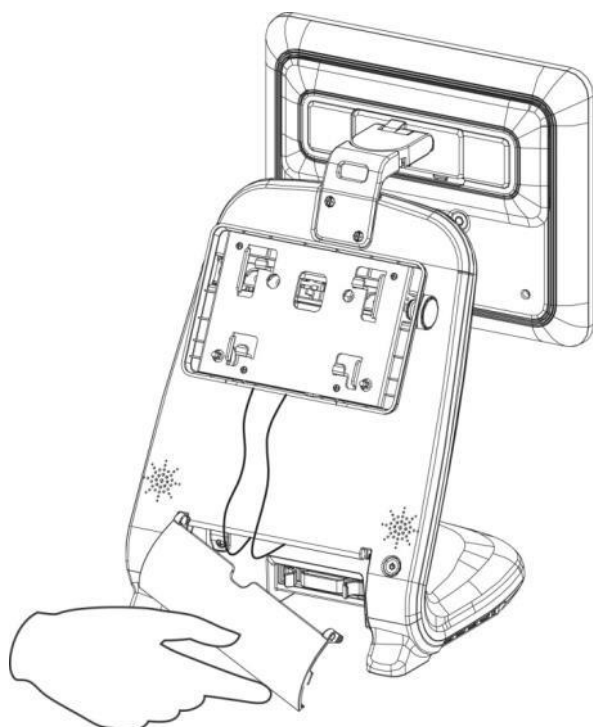
Step6. Fit lower hinge cap under Hinge to put holes in the sample place.

Step7. Assemble the 2nd display with the Hinge.

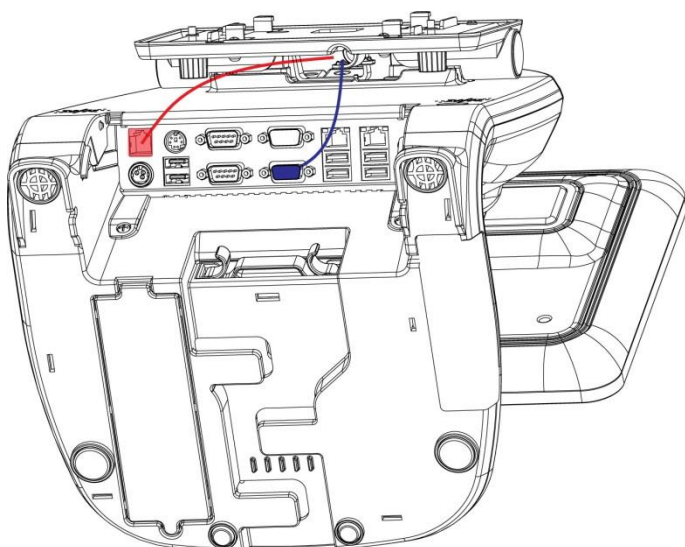
Step8. Fasten 1 screw to fix the hinge.



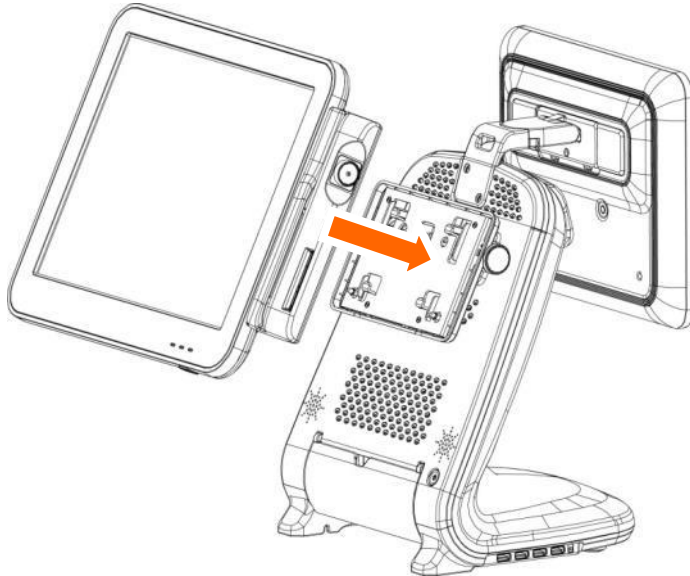
Step9. Assemble the 2nd display with the Hinge of the body.



Step10. Remove the I/O Cover.

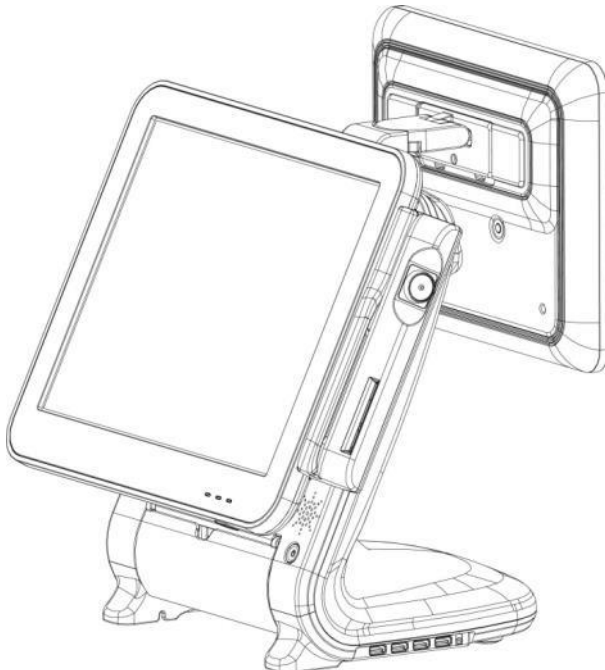


Step11. Fit lower hinge cap under Hinge to put holes in the sample place.
(RJ11 PORT, VGA PORT)



Step14. Carefully equip touch monitor.

Step15. Tighten the rear screws in the direction of "LOCK"



2nd display installation complete

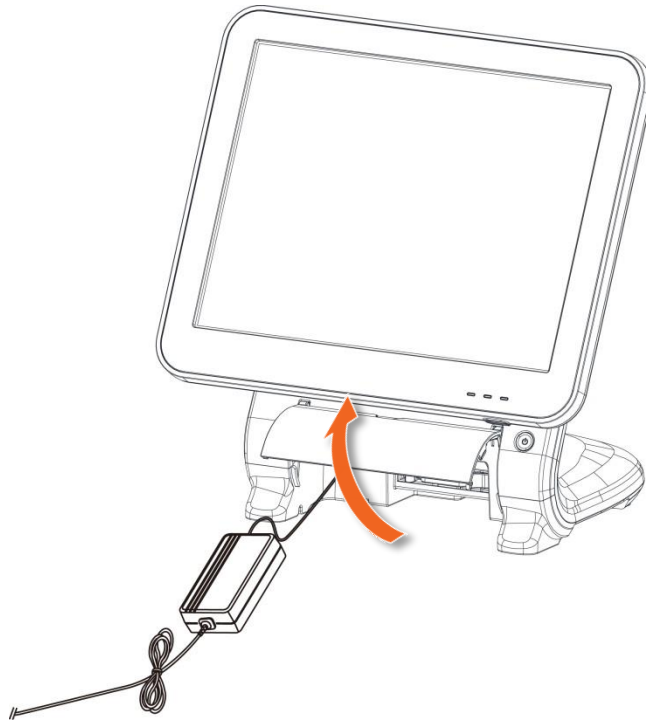
* The unit is successfully installed if the O/S boots on the 2nd display unit.

(3-2) 2nd Display module –Option / Export

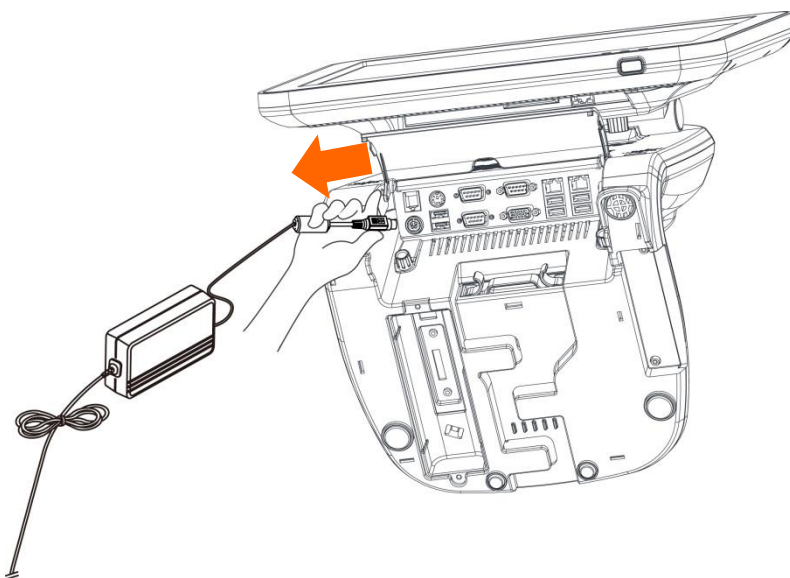
*** Warning: Completely remove power cable when opening main unit or installing optional devices.**

2nd display(10.1, 12.1 inch monitor) – OPTION / Export

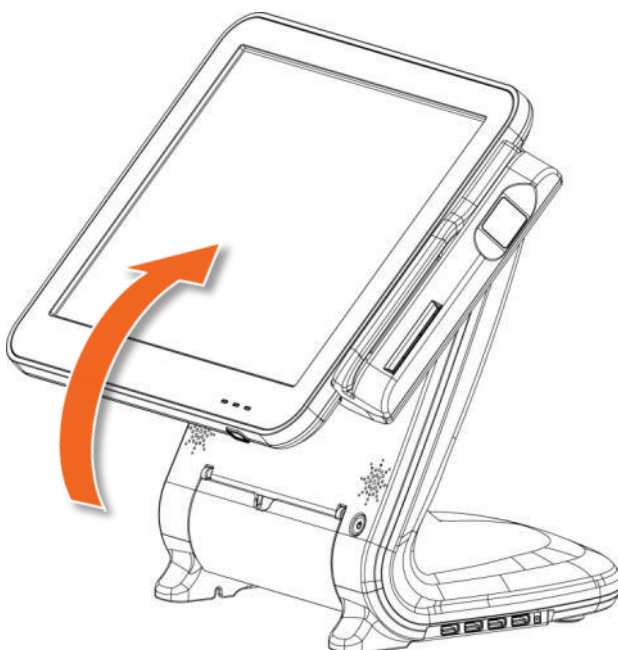
59



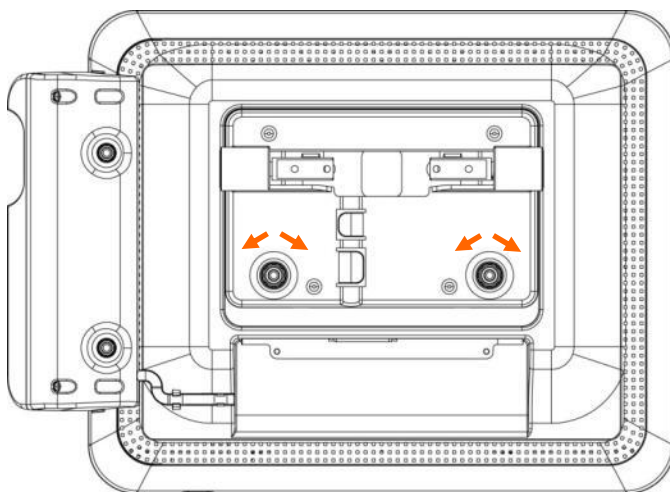
Step1. Please lift up the I/O cover.



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



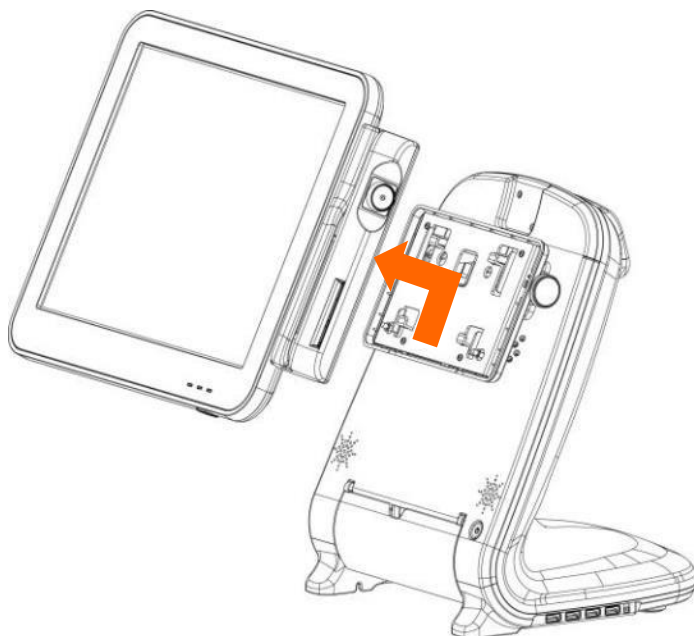
Step3. Lift up the LCD monitor.



Step4. Turn the 2 hand-screws to “open” direction.

Step5. Remove the monitor cable.

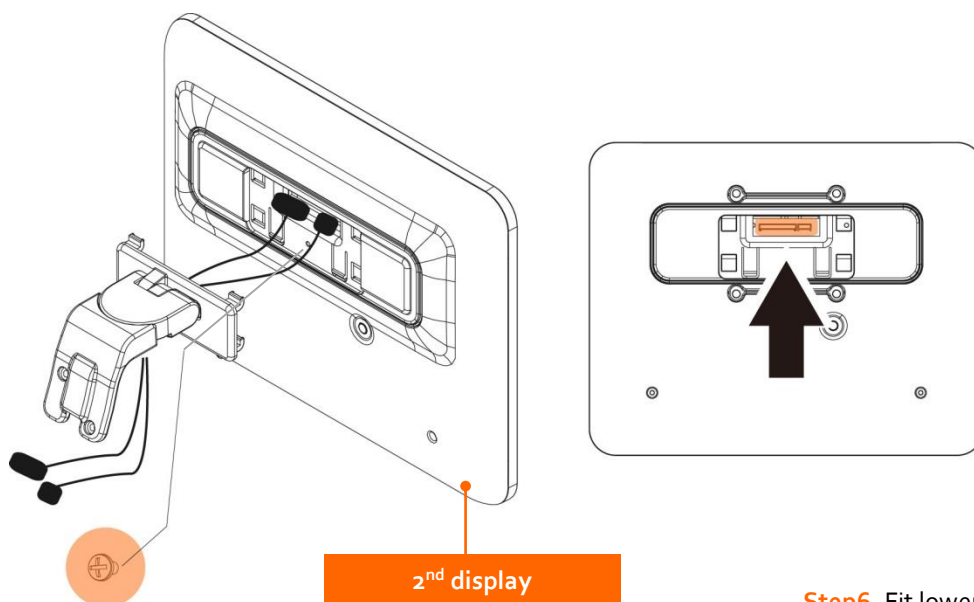




Step6 Lift up the LCD monitor module and detach from the main body.

Step7. Separate LCD monitor module.

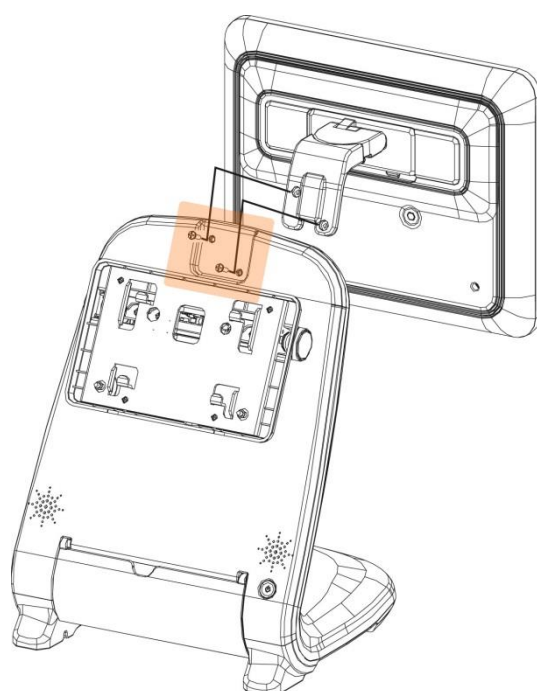
2nd display(10.1, 12.1 inch monitor) – Option / Export



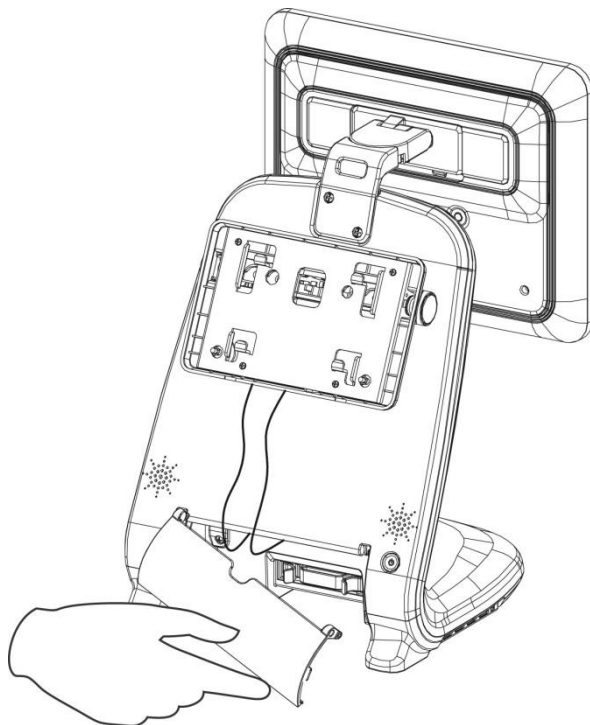
Step6. Fit lower hinge cap under Hinge to put holes in the sample place.

Step7. Assemble the 2nd display with the Hinge.

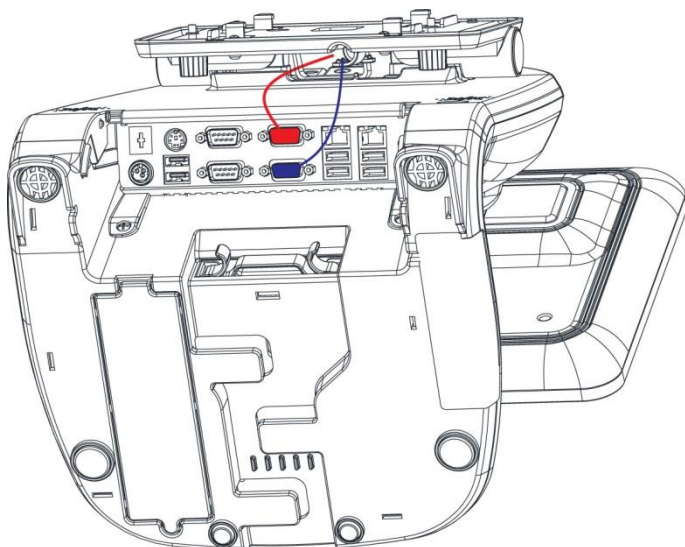
Step8. Fasten 1 screw to fix the hinge.



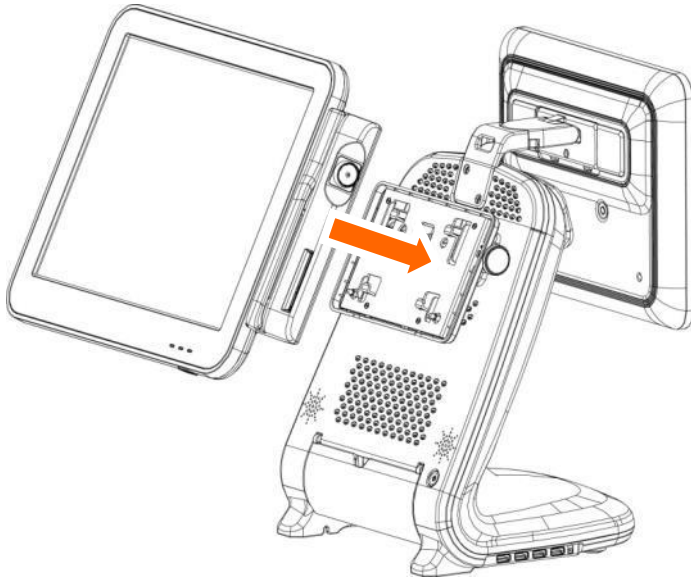
Step9. Assemble the 2nd display with the Hinge of the body.



Step10. Remove the I/O Cover.

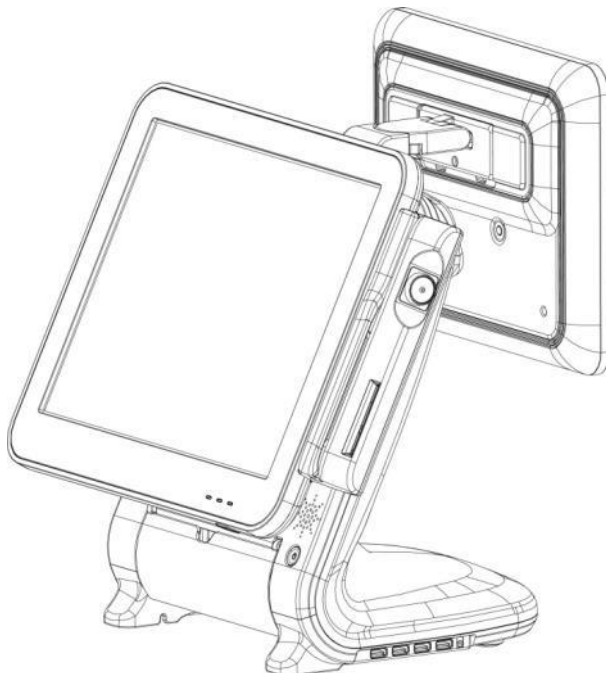


Step11. Fit lower hinge cap under Hinge to put holes in the sample place.
(COM₃ PORT, VGA PORT)



Step14. Reassemble monitor procedure of 'Step3-5'.

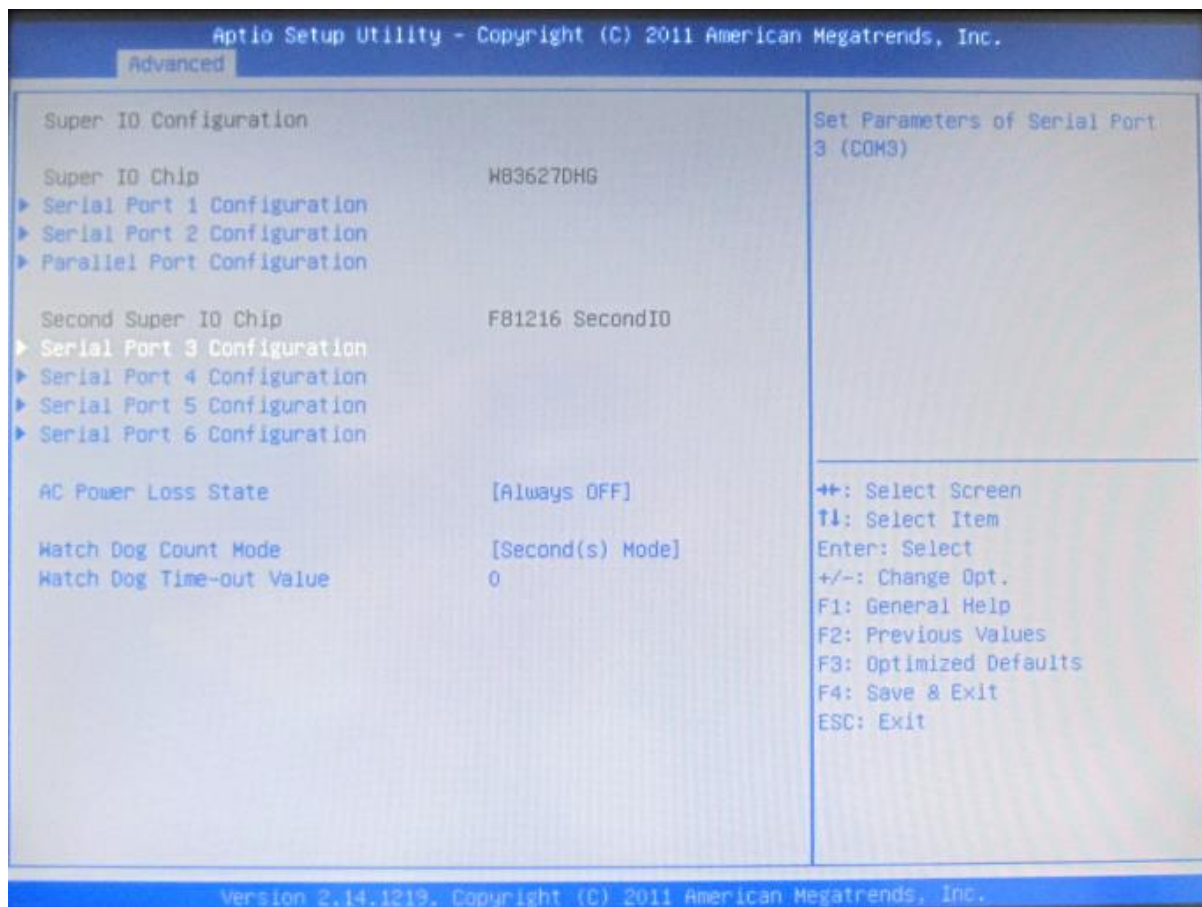
Step15. Tighten the rear screws in the direction of "LOCK"



2nd display installation complete

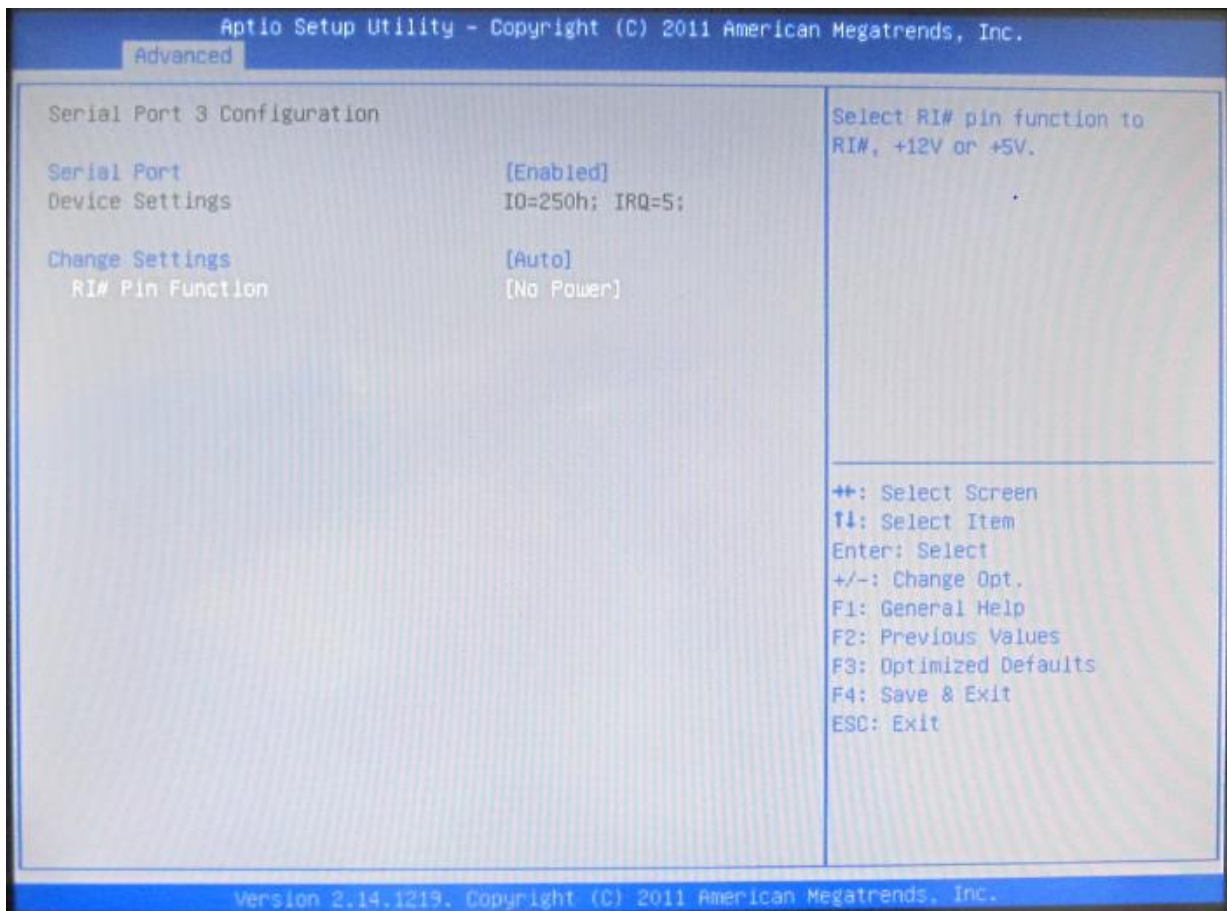
* The unit is successfully installed if the O/S boots on the 2nd display unit.

※ Bios Setup after 2nd display Installation

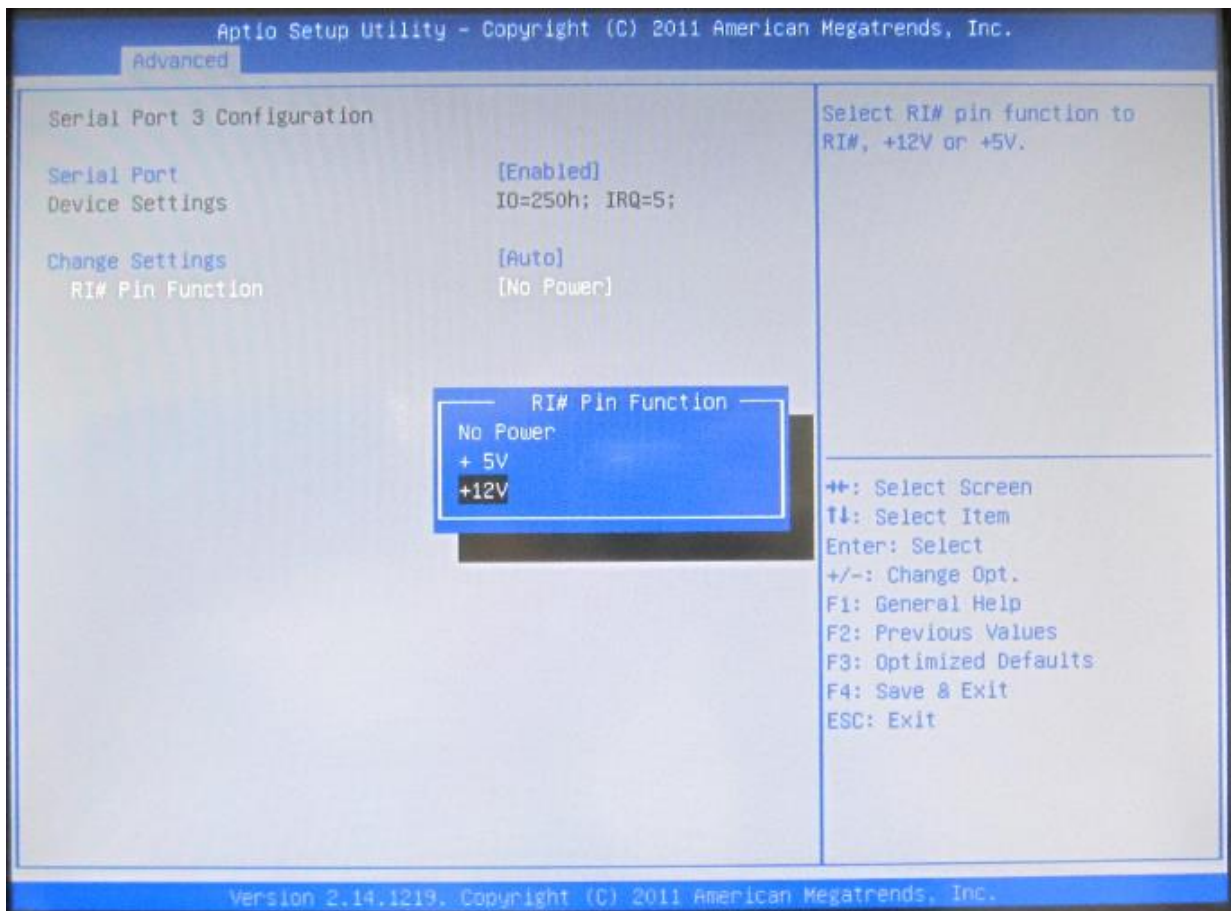


Step14. Connect 2nd display to POS device and turn on AC power.

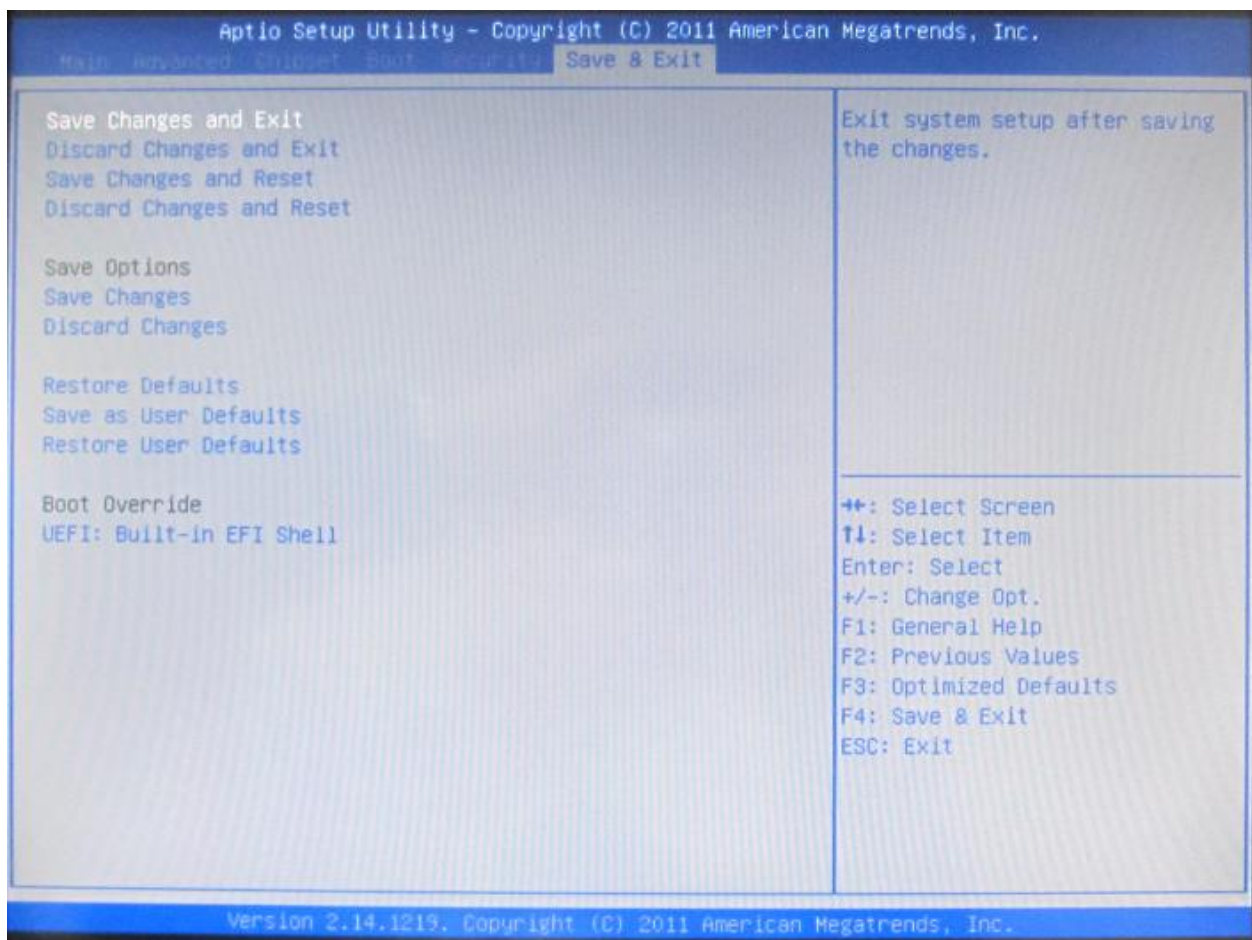
Step15. While booting POS device, press 'Delete' key and enter into BIOS mode. Select 'Advanced – Serial Port 3 Configuration'.



Step16. After enter to 'Serial Port 3 Configuration' mode, select 'Change Settings – RI # Pin Function'.



Step17. Change 'RI# Pin Function - [No Power]' to '+12V'.



Step18. After saving the configuration please choose 'Save & Exit'

Step19. POS terminal will be rebooted.

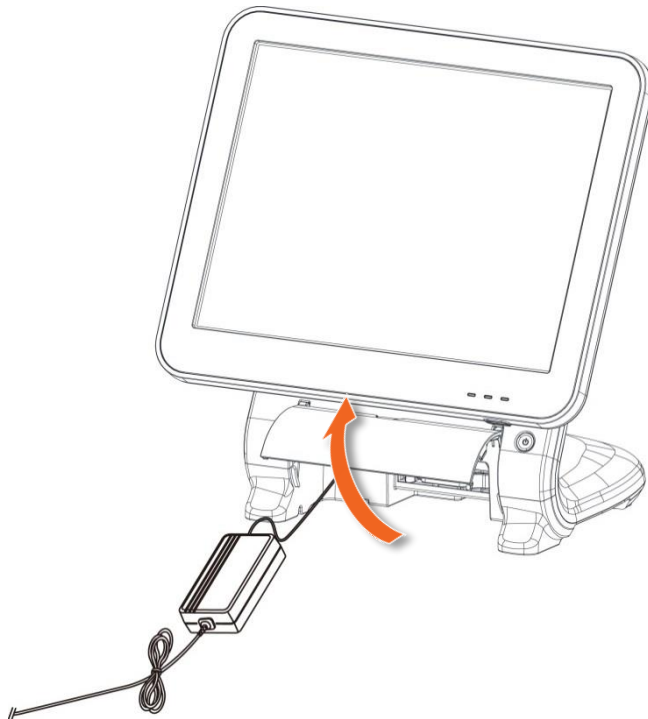
You can see the default is changed into COM3 and 12V

※ **Caution: Set the BIOS after assembling 2nd LCD with pos terminal**

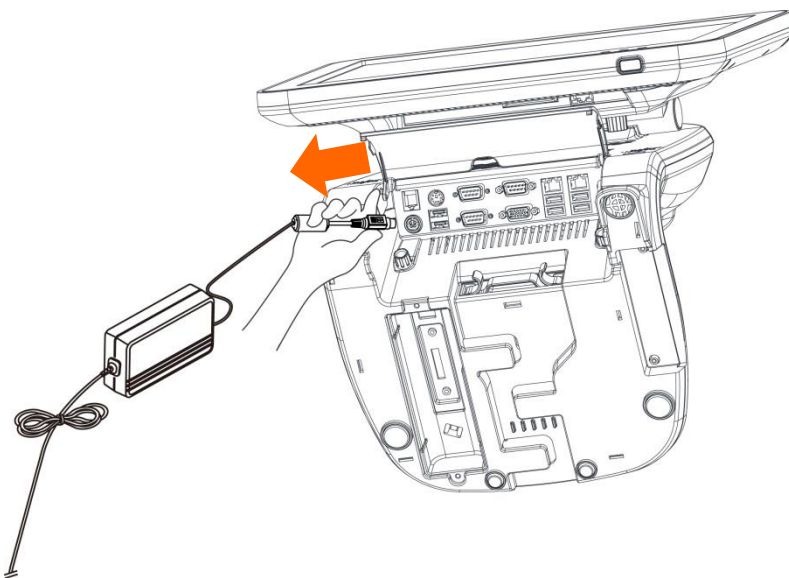
(4-1) MSR Module - Option

** Warning: Completely remove power cable when opening main unit or installing optional devices.*

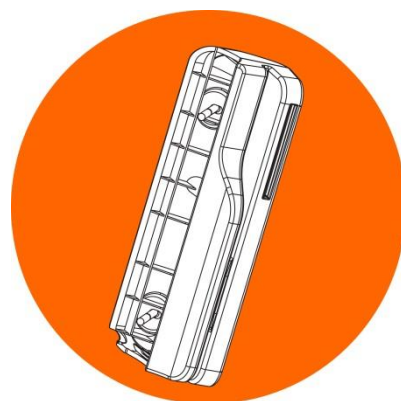
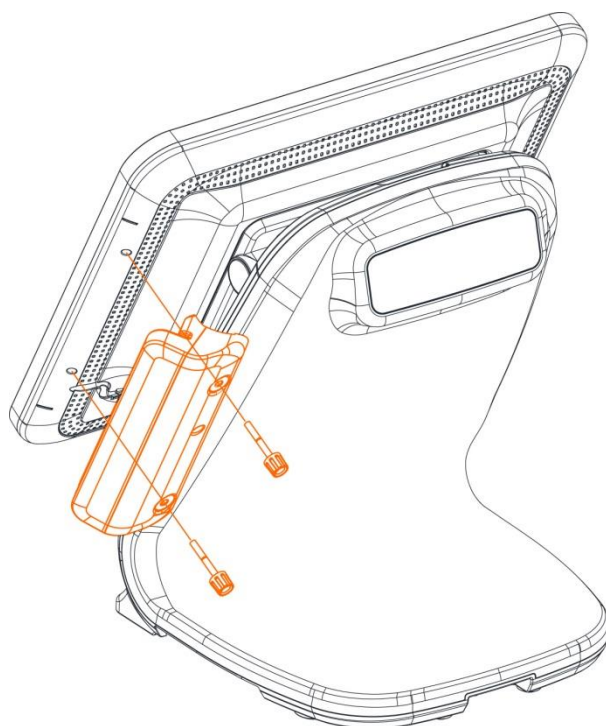
MSR-OPTION



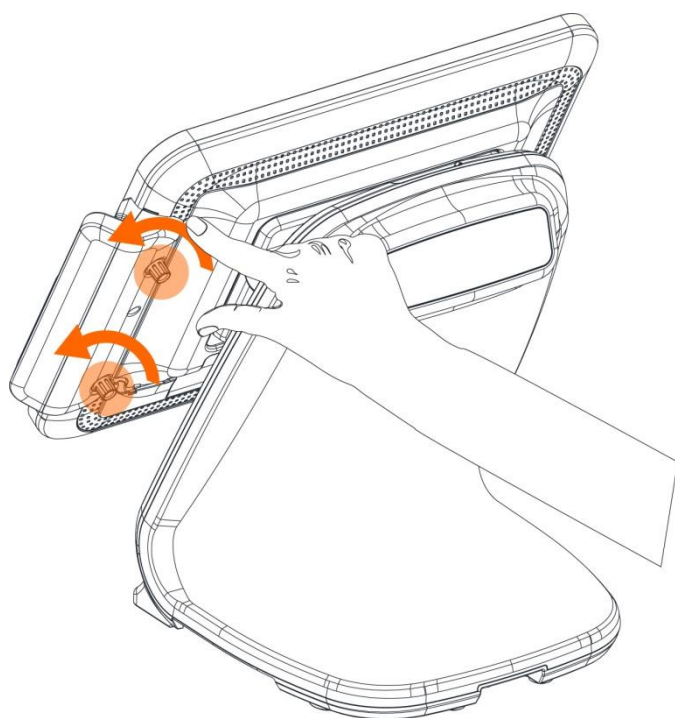
Step1. Please lift up the I/O cover.



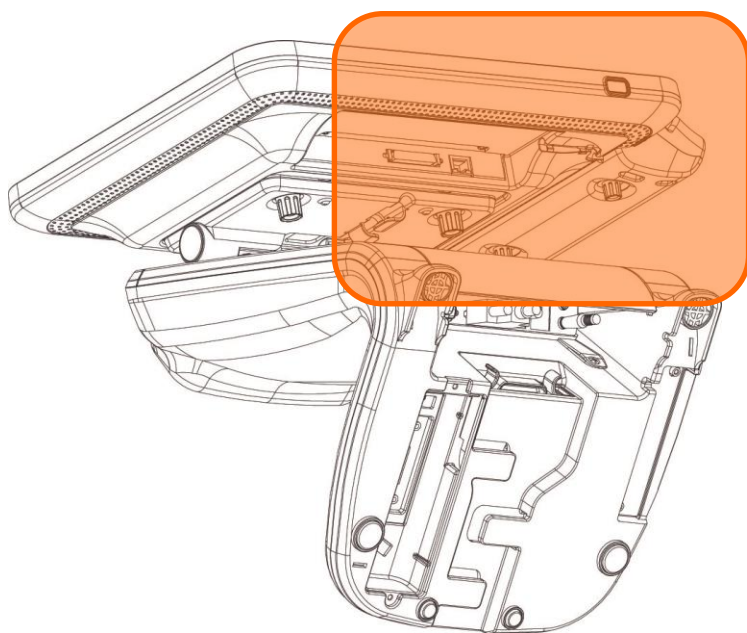
Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



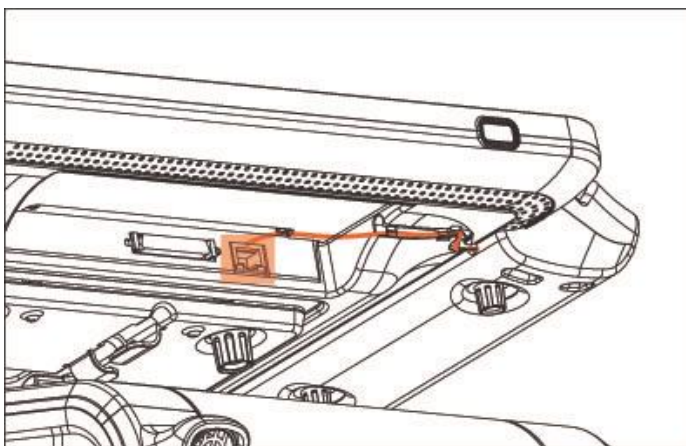
Step 3. Assemble 2 screws from side using hand. (as shown above)



Step 4. Assemble the MSR

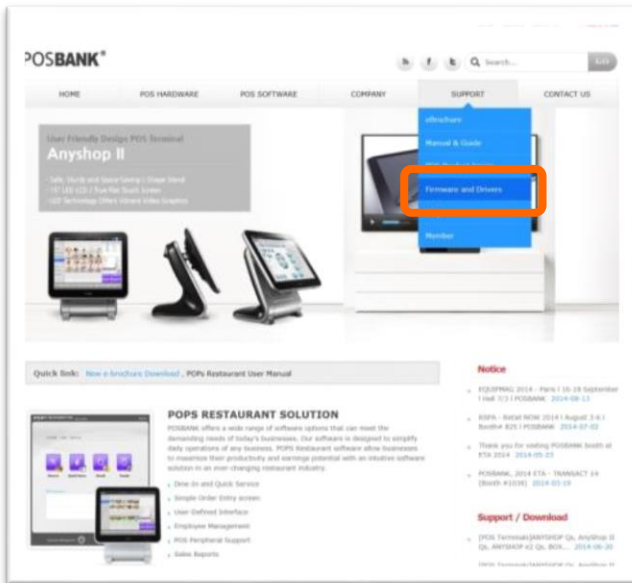


Zoom in



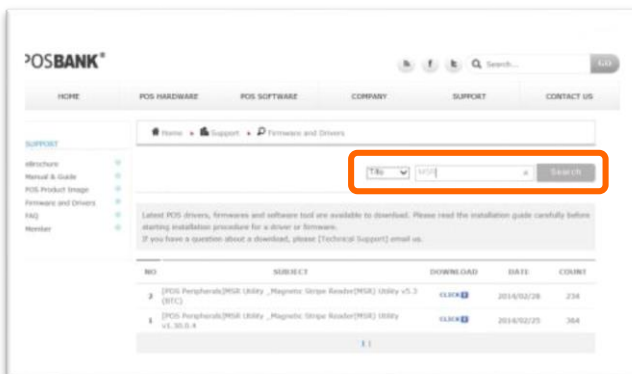
Step 5. Monitor under put holes in the sample place.

MSR+SCR+I-Button (another guess) Module – Option



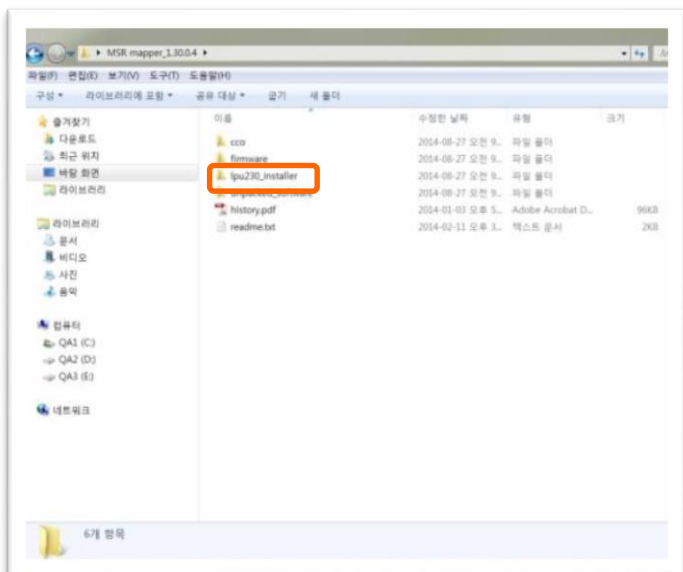
Step6. Access to POSBANK homepage

Step7. Click on the button on the toolbar
(Position : SUPPORT -> Firmware and Drivers)



Step8. Search the MSR at search engine.

Step9. Download the MSR mapper file
(file name : [POS Peripherals]MSR Utility_Magnetic Stripe Reader(MSR) Utility)



Step10. Double click [lpuz30 installer] file and double click the lpuz30.msi



Step11. Click NEXT..

Step12. After the installation is complete

'Select Device' to Make sure that the choice is normally a FW update.

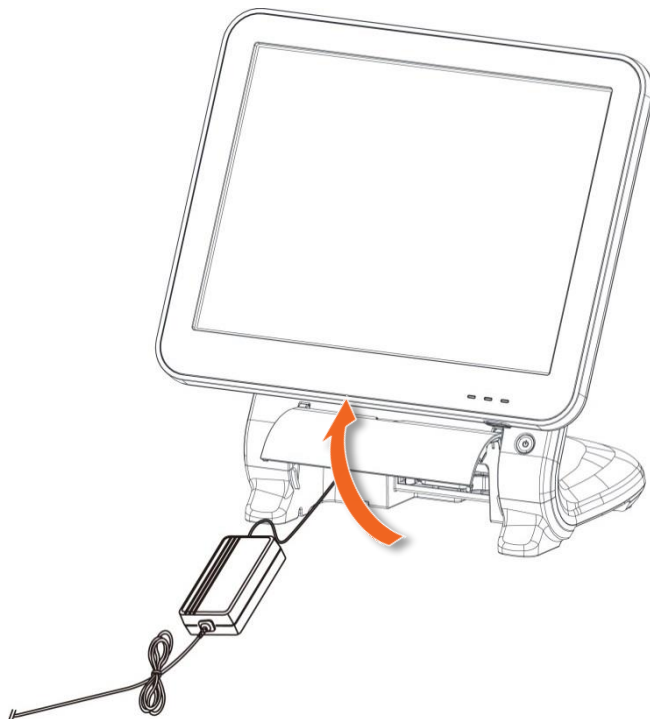


E type
Do- MSR, SCR, I-button
Do not-X

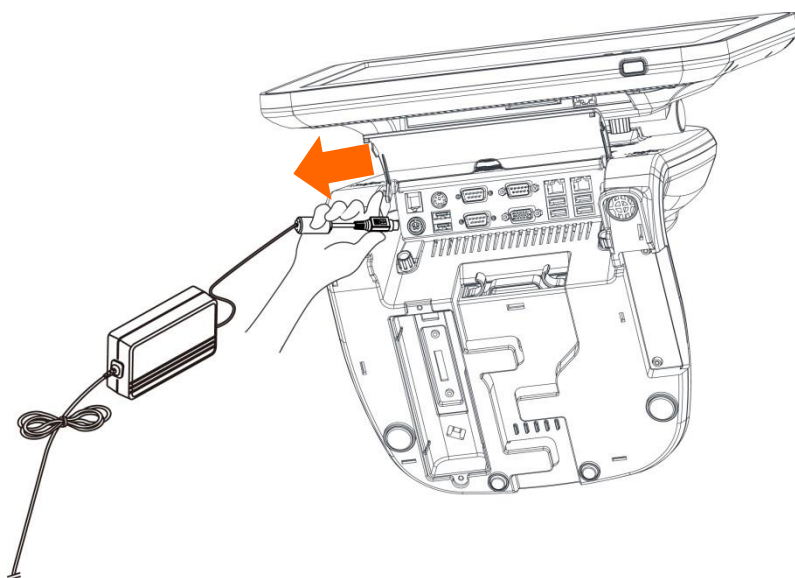
(4-2) Insert SCR to MSR Module – Option

** Warning: Completely remove power cable when opening main unit or installing optional devices.*

Insert SCR to MSR - OPTION

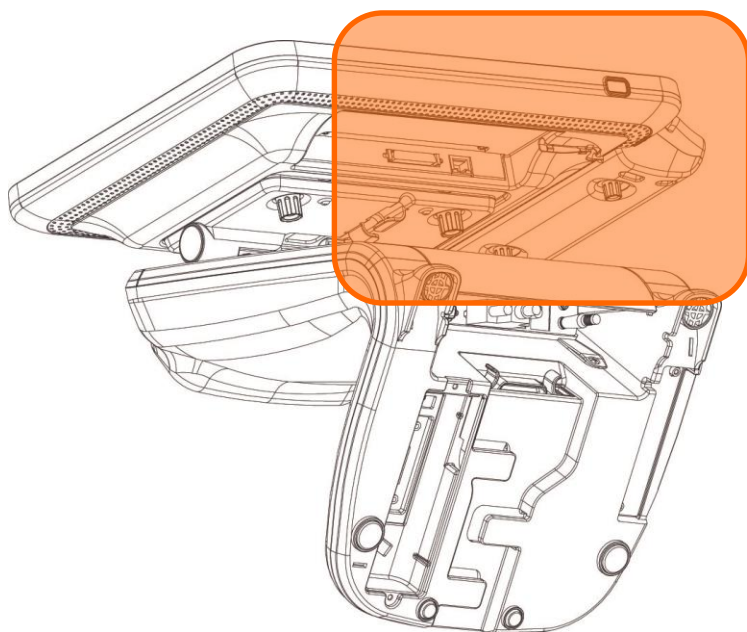


Step1. Please lift up the I/O cover.



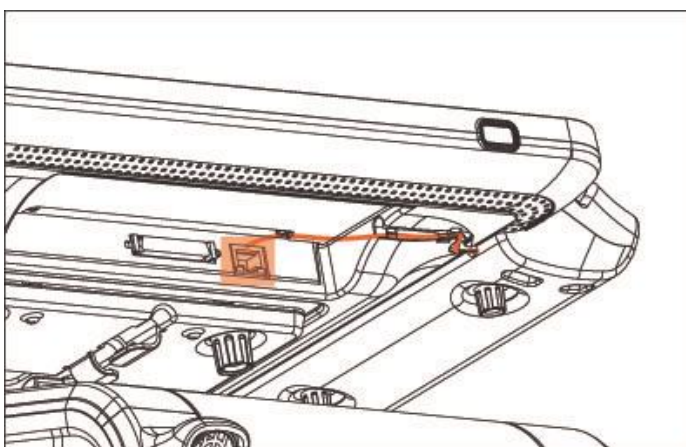
Step2. Remove the adapter cable.
Disconnect cap from base of Unit.

Insert SCR to MSR - Option



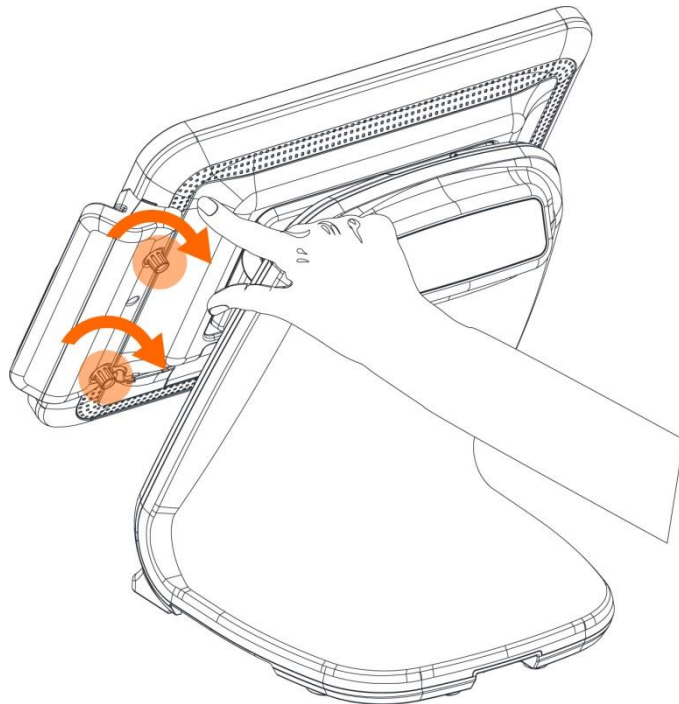
76

Zoom in

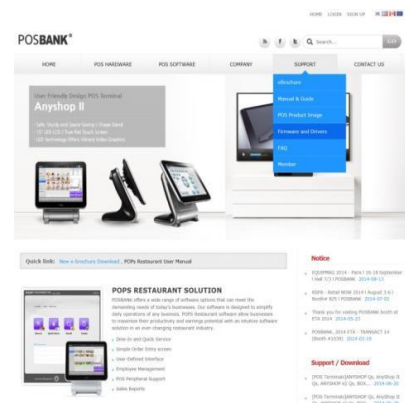
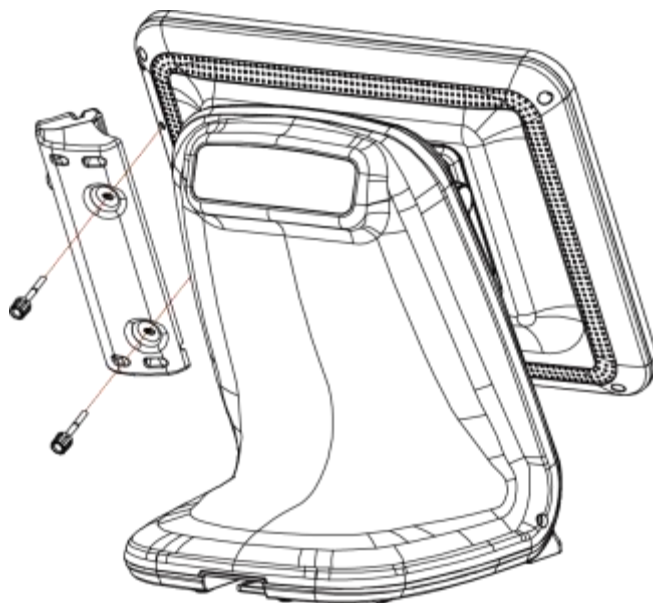


Step3. Monitor under put out holes in the sample place.

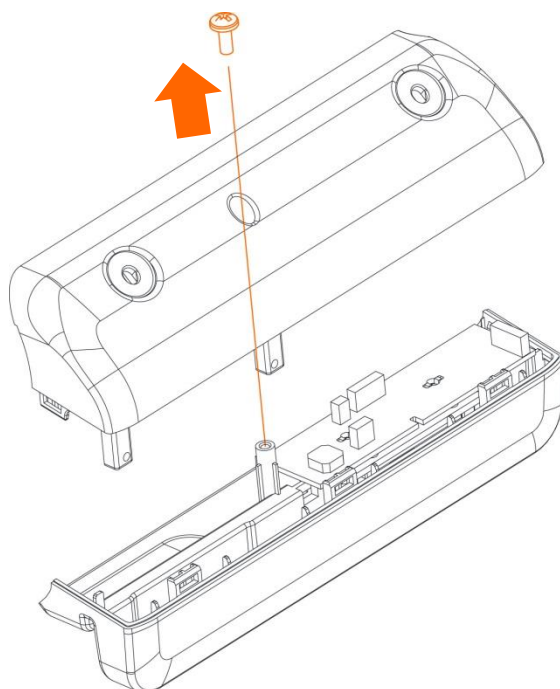
Insert SCR to MSR - OPTION



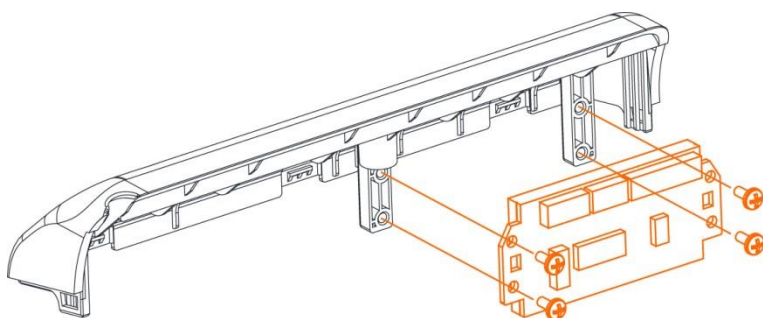
Step4. Separate 2 screws from side using hand. (as shown above)



Insert SCR to MSR - Option



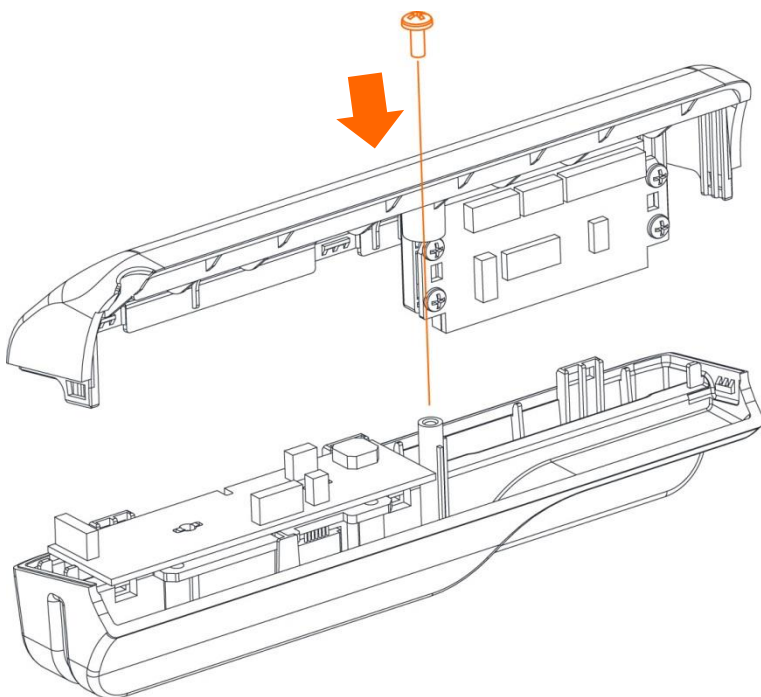
Step5. Turn screw and remove separate MSR module. (lift up)



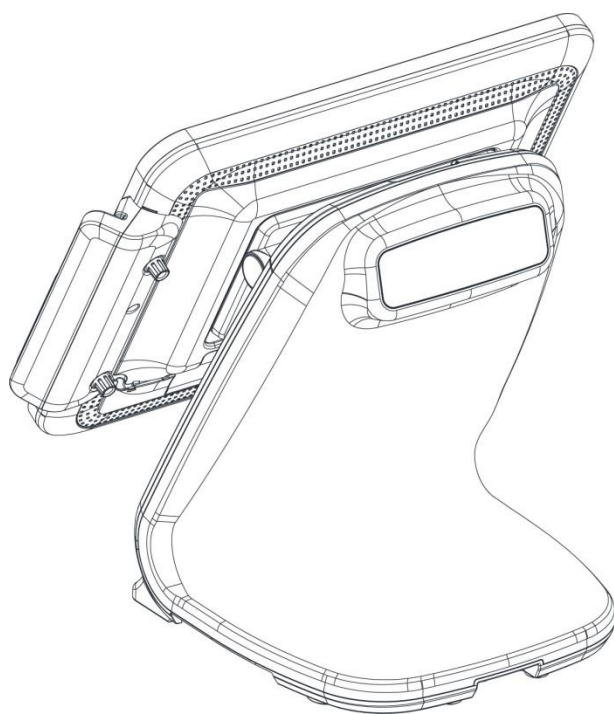
Step6. Fasten 4 screws to fix the MSR rear case.

Insert SCR to MSR - Option

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Step7. Fasten 1 screw to fix the MSR module.



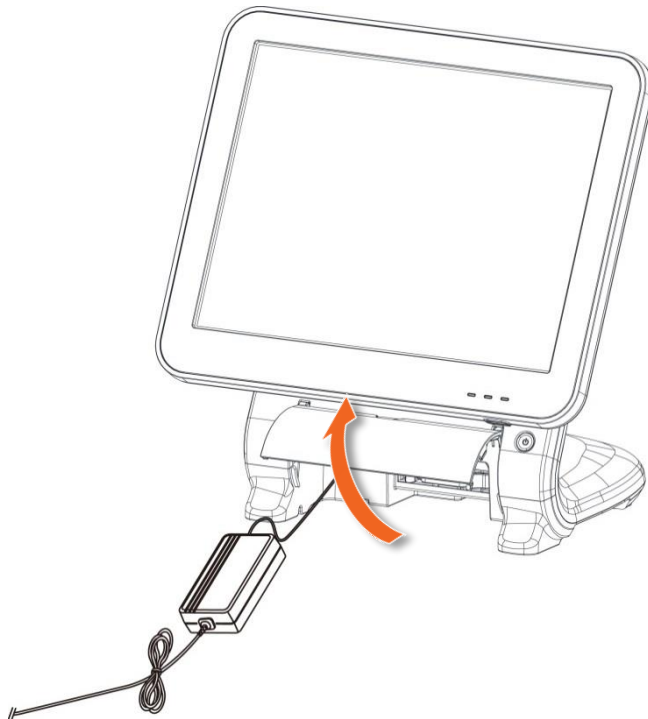
Step8. Reassemble a unit using the reverse procedure of step1-4 above.

(4-3) MSR+SCR+I-Button (another guess) Module – Option

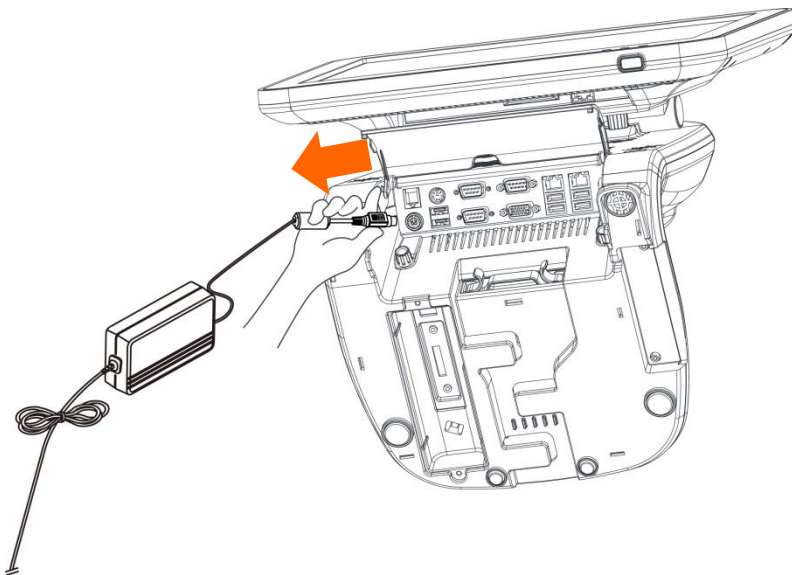
** Warning: Completely remove power cable when opening main unit or installing optional devices.*

MSR-OPTION

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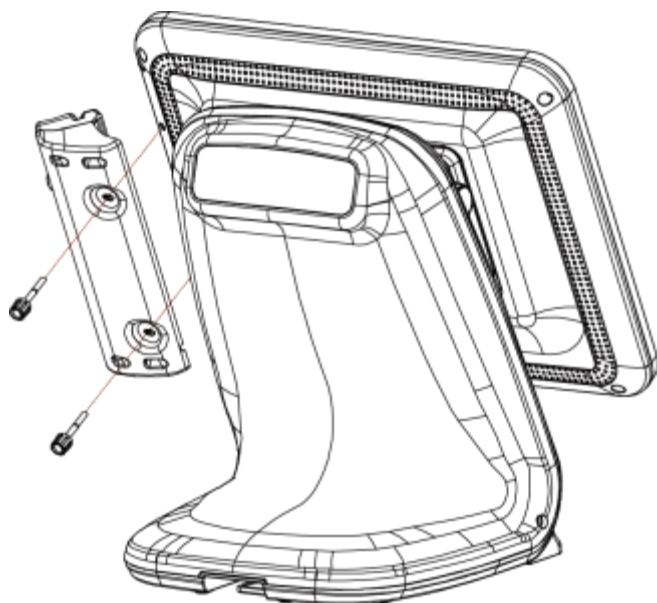


Step1. Please lift up the I/O cover

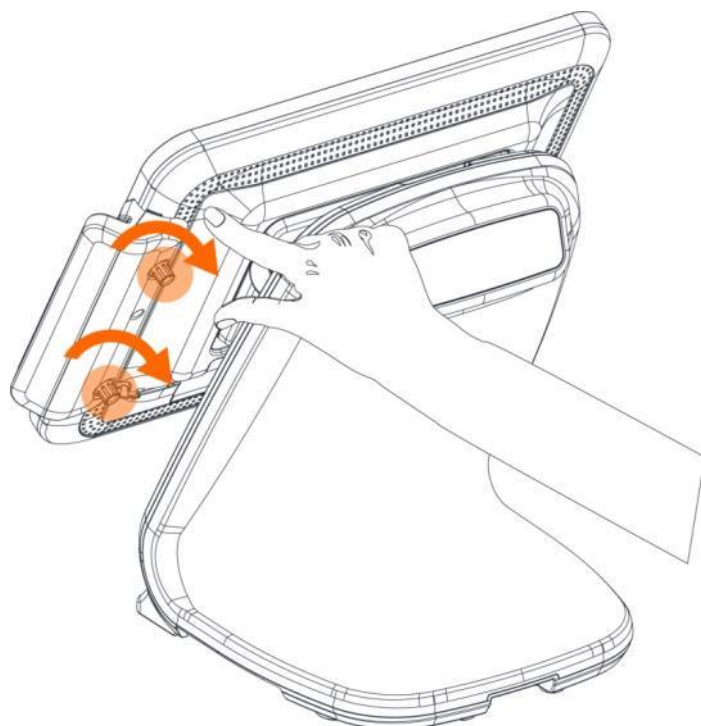


Step2. Remove the adapter cable.
Disconnect cap from base of Unit.

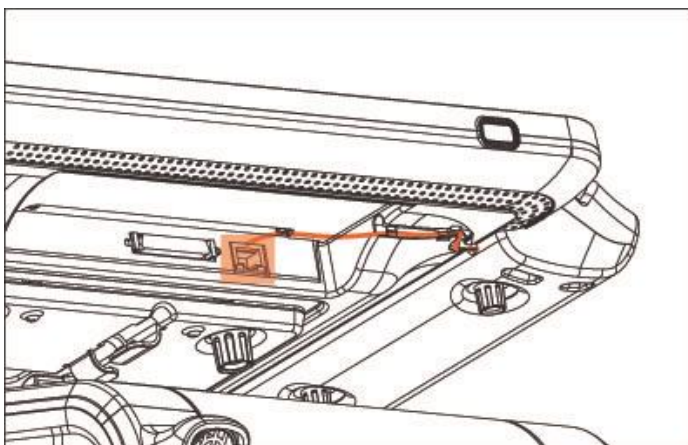
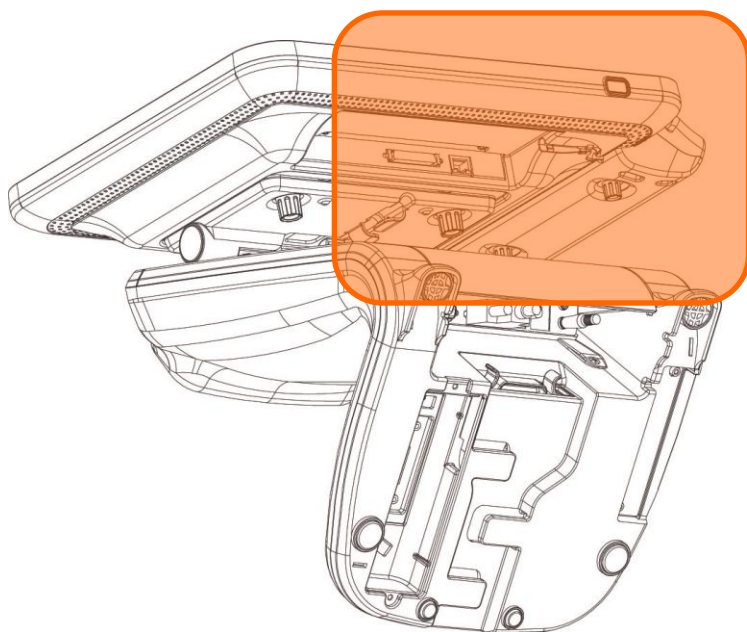
MSR+SCR+I-Button (another guess) Module – Option



Step 3. Assemble 2 screws from side using hand. (as shown above)

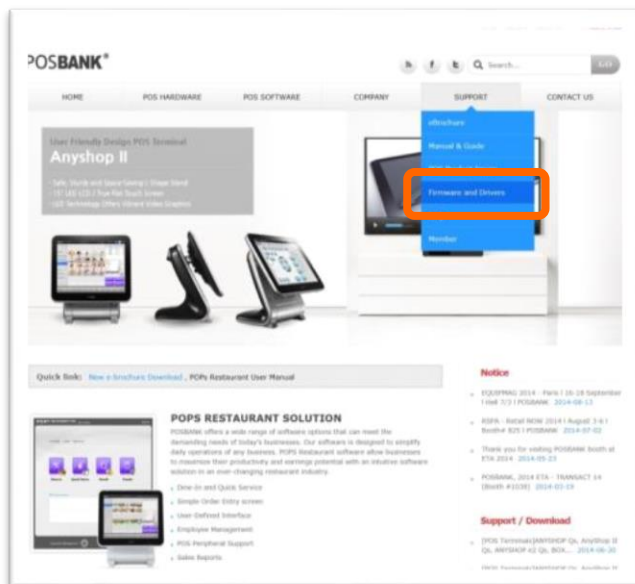


Step 4. Assemble The MSR+SCR+I-Button.



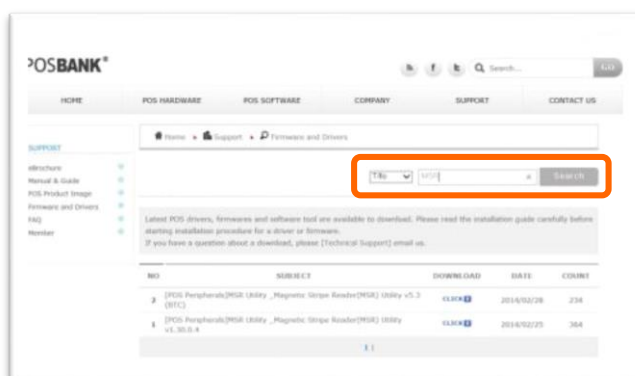
Step 5. Monitor under put out holes in the sample place.

MSR+SCR+I-Button (another guess) Module – Option



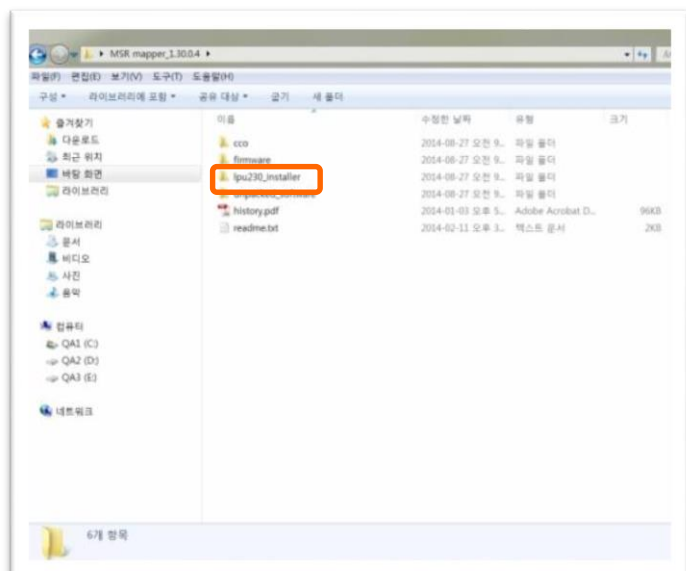
Step6. Access to POSBANK homepage

Step7. Click on the button on the toolbar
(Position : SUPPORT -> Firmware and Drivers)



Step8. Search the MSR at search engine.

Step9. Download the MSR mapper file
(file name : [POS Peripherals]MSR Utility _Magnetic Stripe Reader(MSR) Utility)



Step10. Double click [lpu230 installer] file and double click the lpu230.msi



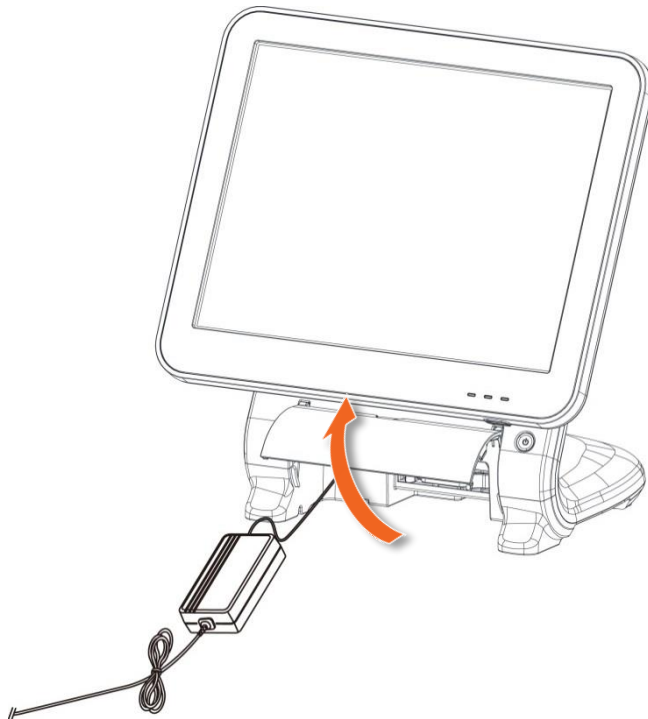
Step11. Click NEXT..

Step12. After the installation is complete
'Select Device' to Make sure that the choice is
normally a FW update.

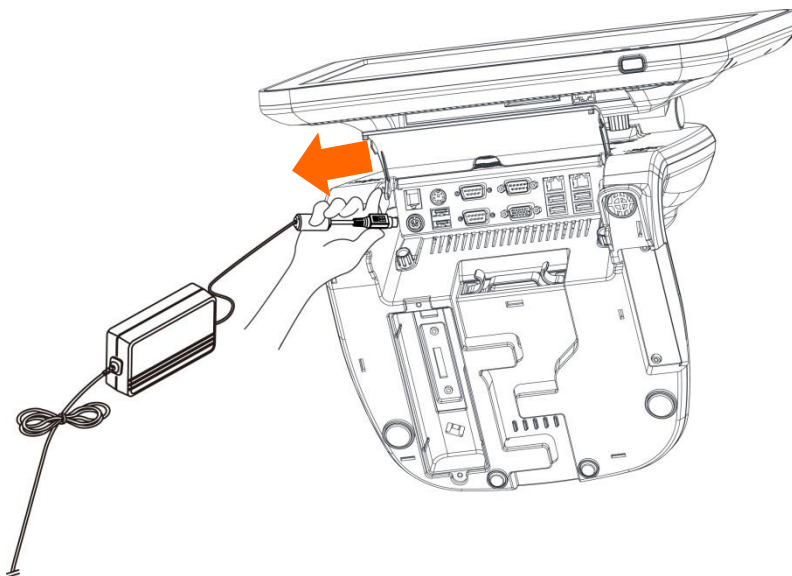
(5) USB Module - Option

** Warning: Completely remove power cable when opening main unit or installing optional devices.*

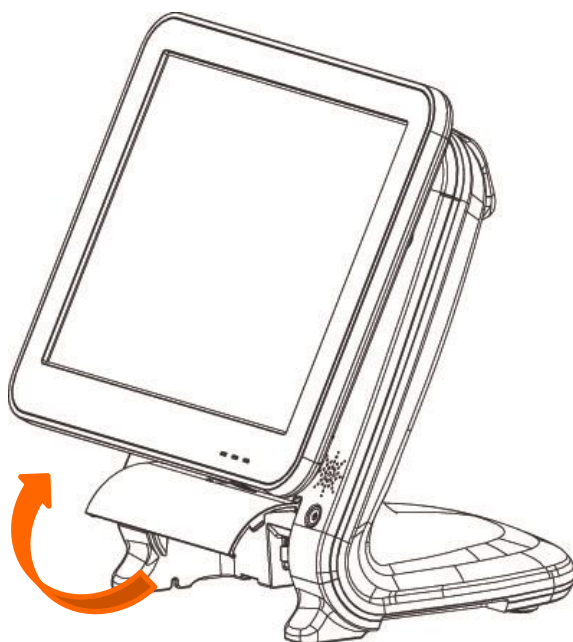
USB-Option



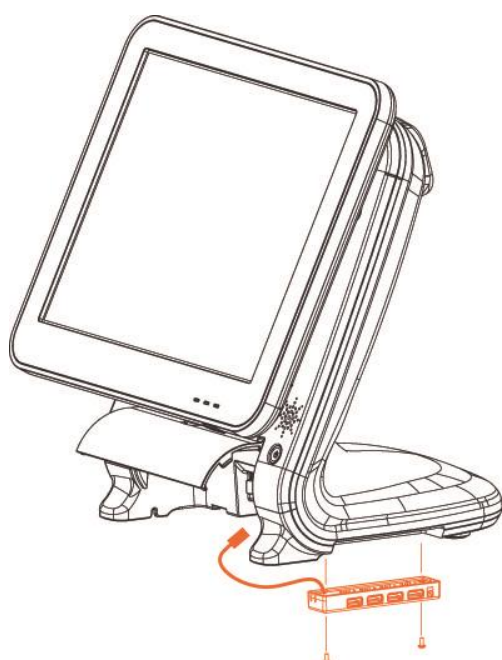
Step1. Please lift up the I/O cover.



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Lift up the I/O COVER.

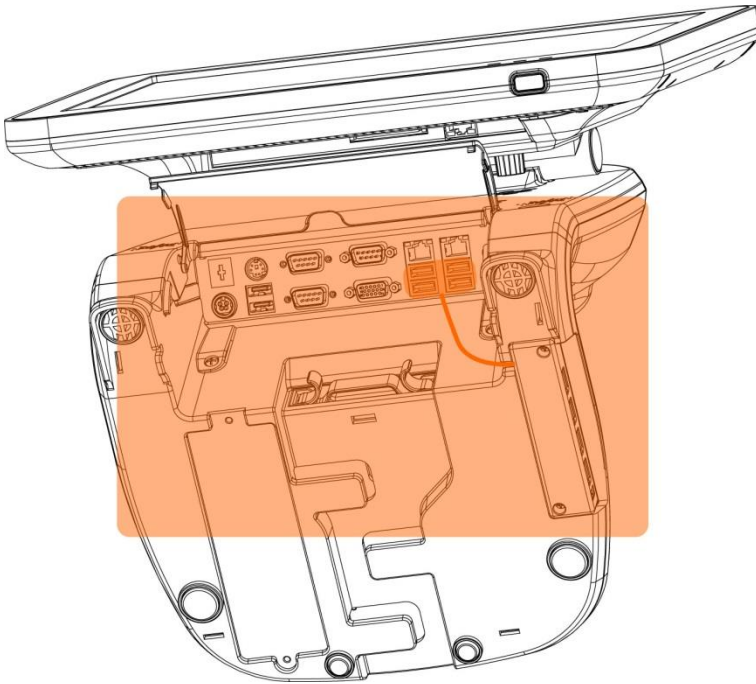


Step4. Assemble the USB with the Body.

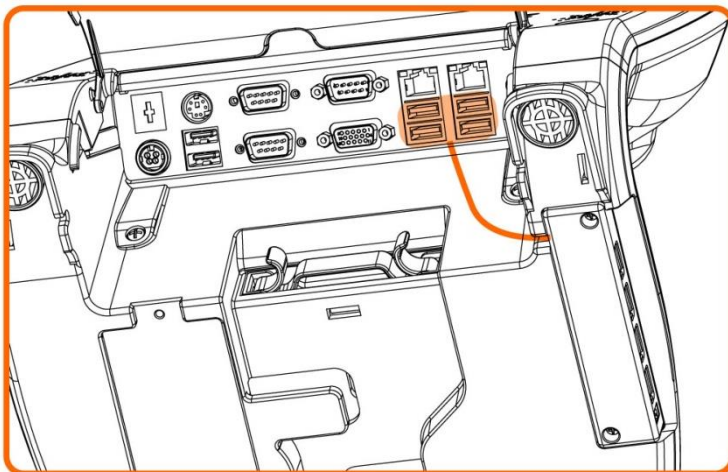
Step5. Fasten 2 hand screw to fix the USB..

USB - Option

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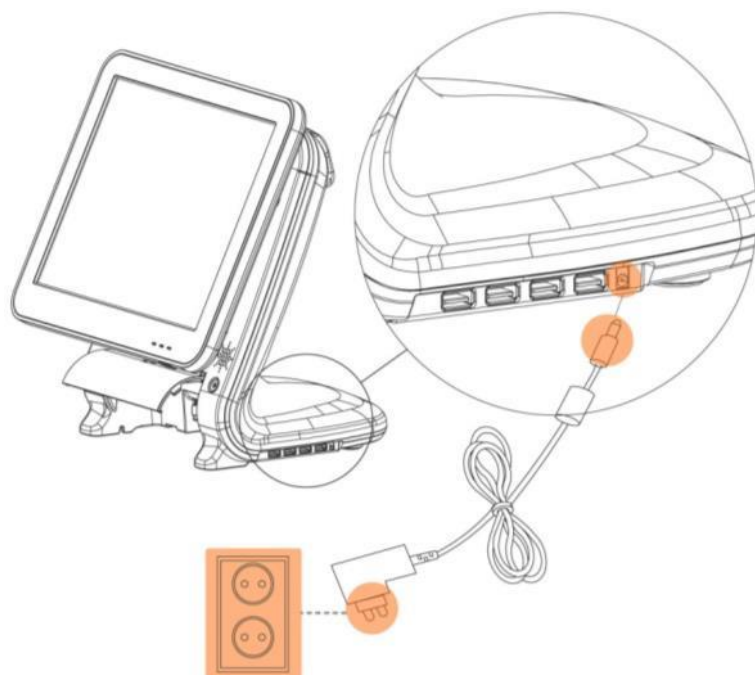


Zoom in



Step6. Put holes in the sample place.
(USB Port)

USB - Option

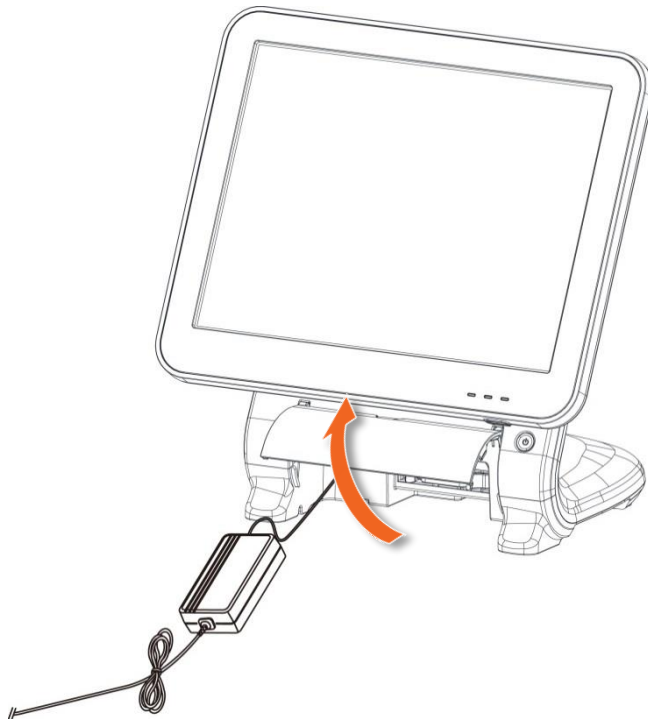


Step7. Put holes in the sample lace.
(POWER PORT)

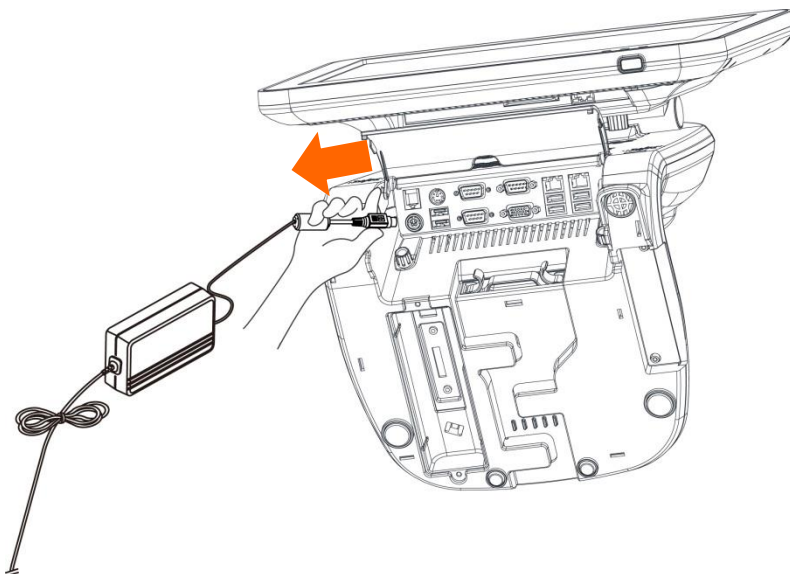
(6) Smart Battery Module – Option

** Warning: Completely remove power cable when opening main unit or installing optional devices.*

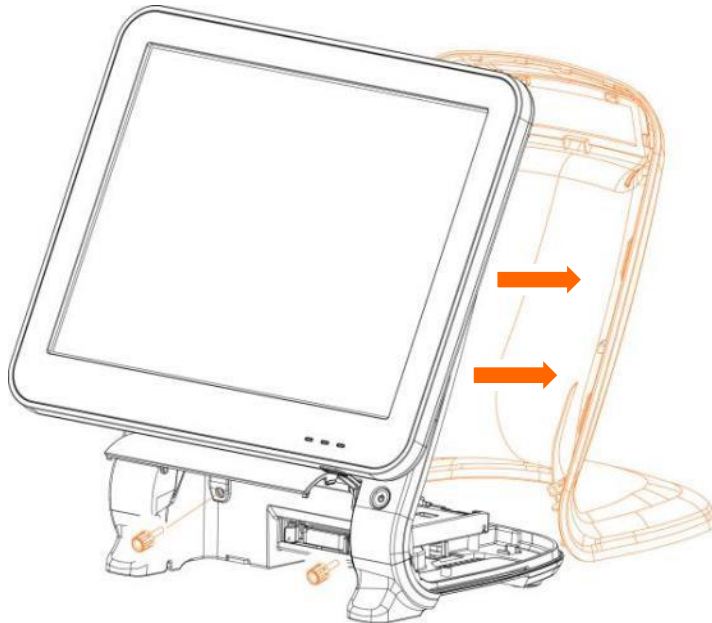
Smart Battery Module



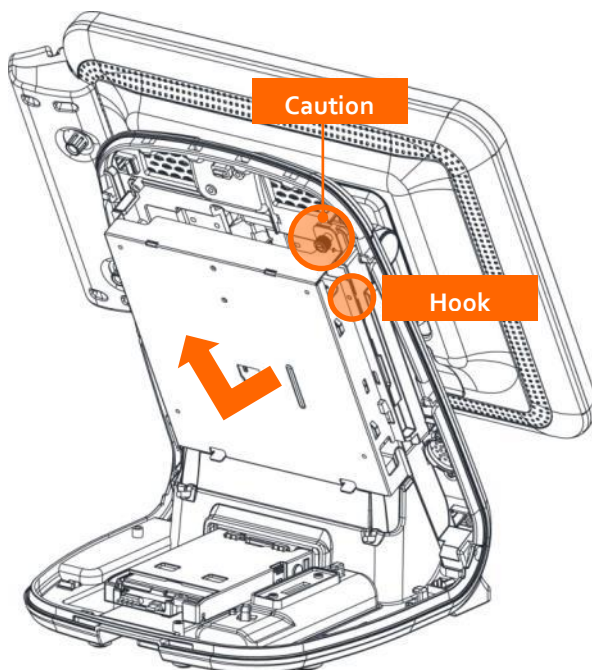
Step1. Please lift up the I/O cover.



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Separating Back cover.

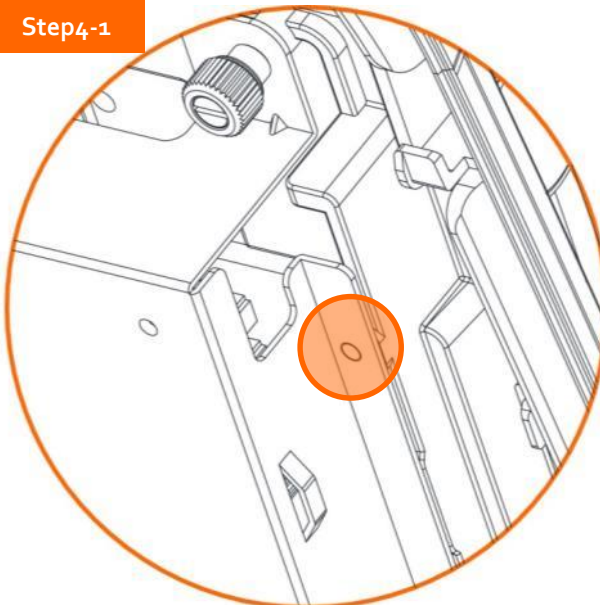


Step4. Turn hand screw and remove Mother board Bracket. (Pull and lift up)

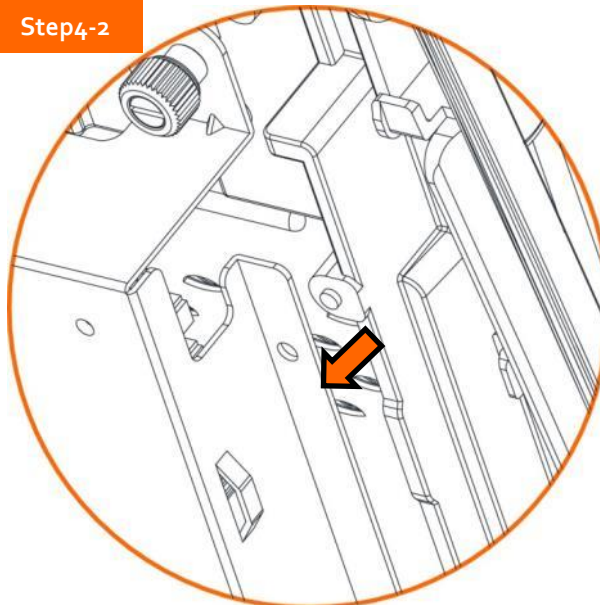
Caution : Look at the frame hook before pull and lift up.

Zoom in

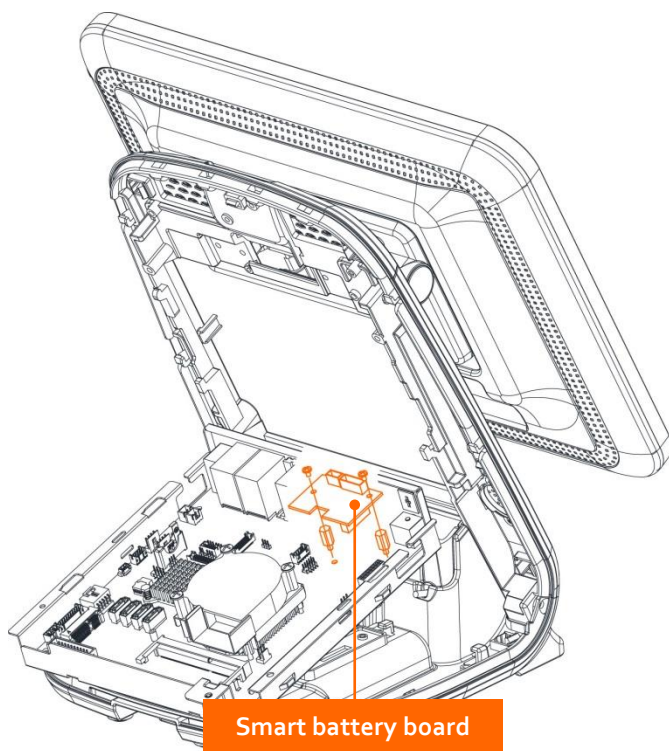
Step4-1



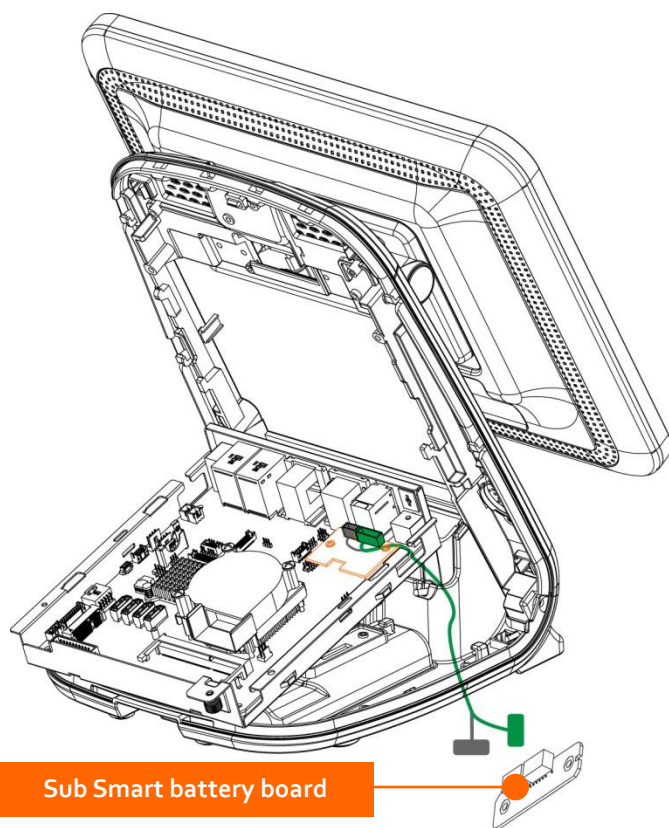
Step4-2



Caution : Look at the frame hook before pull and lift up.

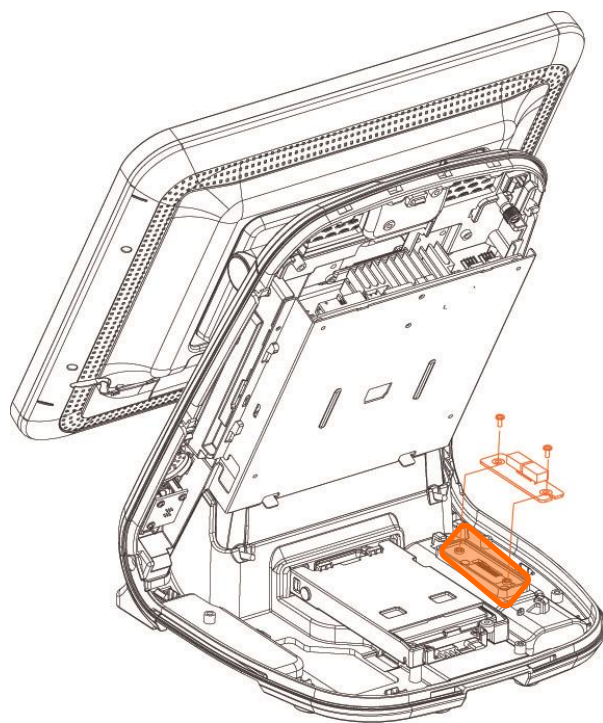


Step5. Put holes in the sample place.
(Image reference/CN2 PORT) and connect smart battery board

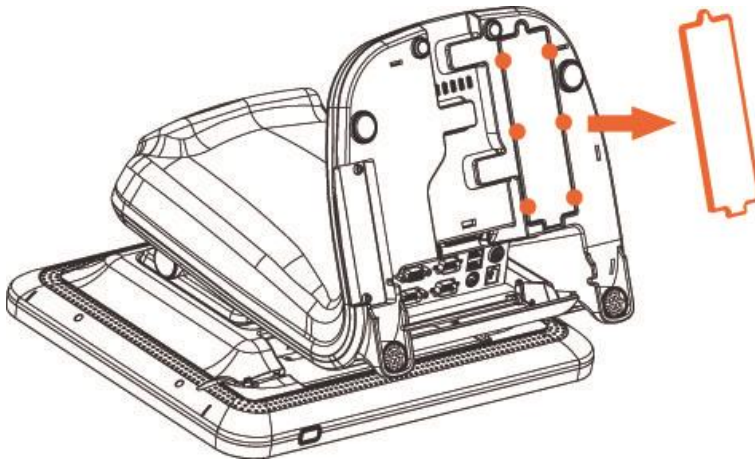


Step6. Connect cable to smart battery board.and connect cable other sub smart battery board

Step7. Reassemble Mother board reverse procedure of 'Step4'.

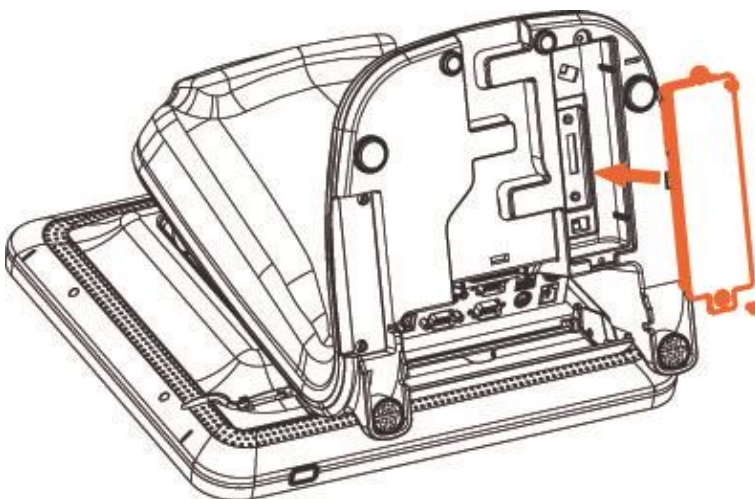


Step8. Insert sub smart battery board assemble by 2 screws.



Step9. Lay down the product on soft cloth.

Step10. Use cutter or ripper to remove Smart battery cover.



Step11. Insert Smart battery and assemble by 2 screws.

-Warning-

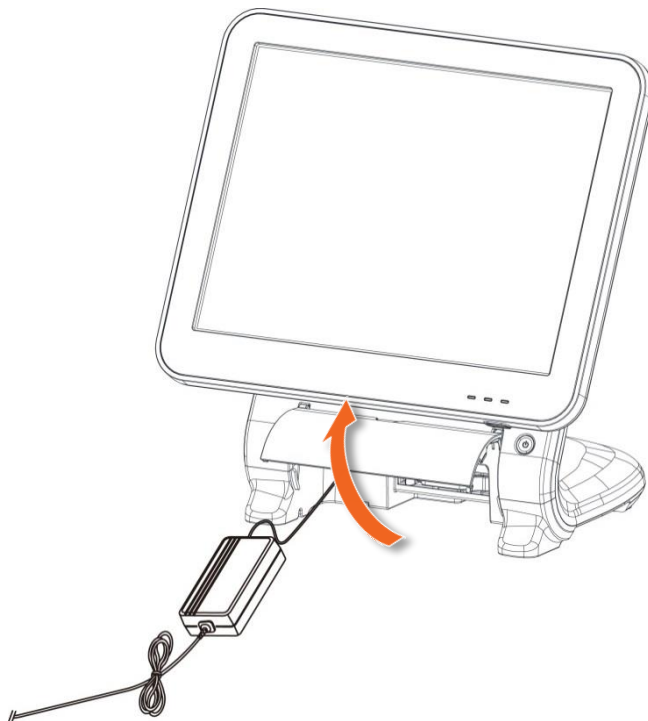
1. When power cable connect the product, Do not disassemble of assemble the products.
2. Check the Smart battery.

(7) Speaker Module - Option

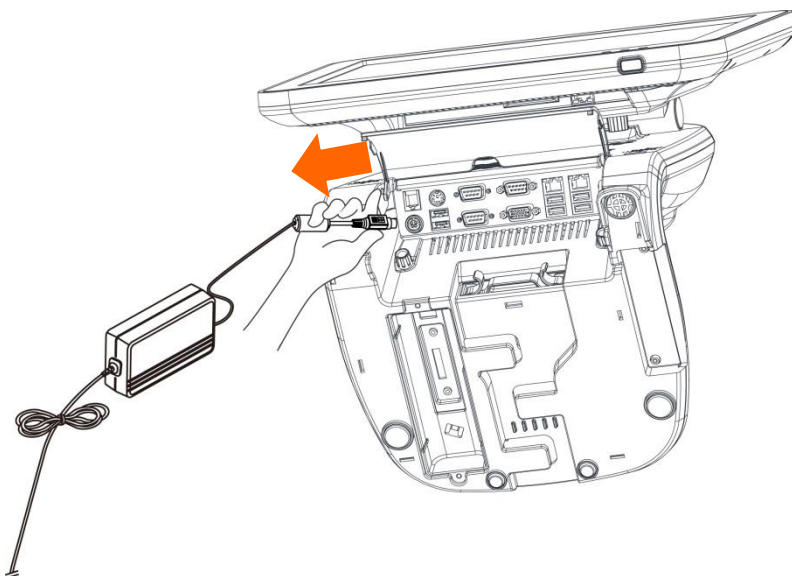
** Warning: Completely remove power cable when opening main unit or installing optional devices.*

Speaker-Option

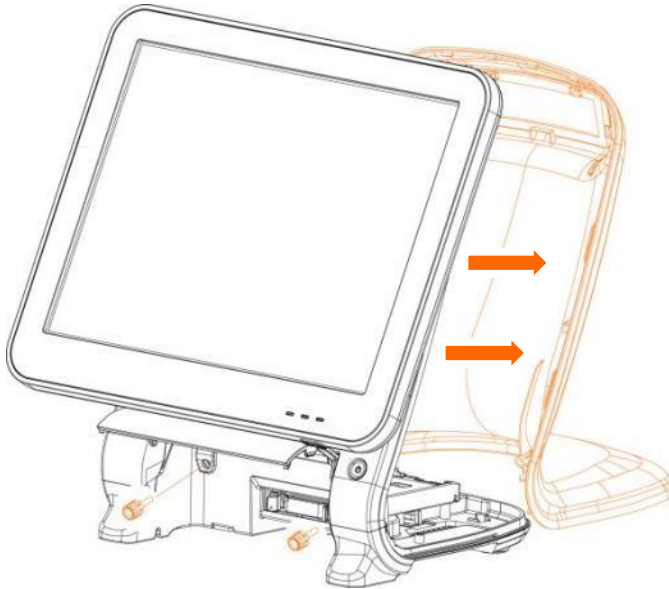
95



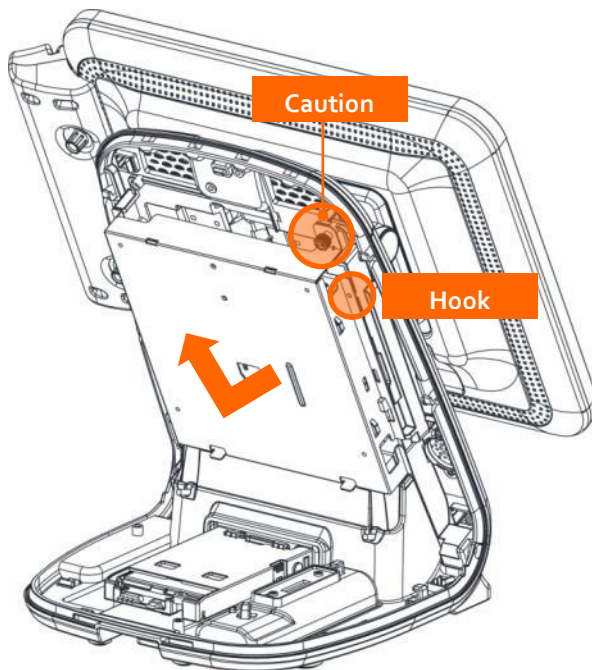
Step1. Please lift up the I/O cover.



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Separating Back cover.

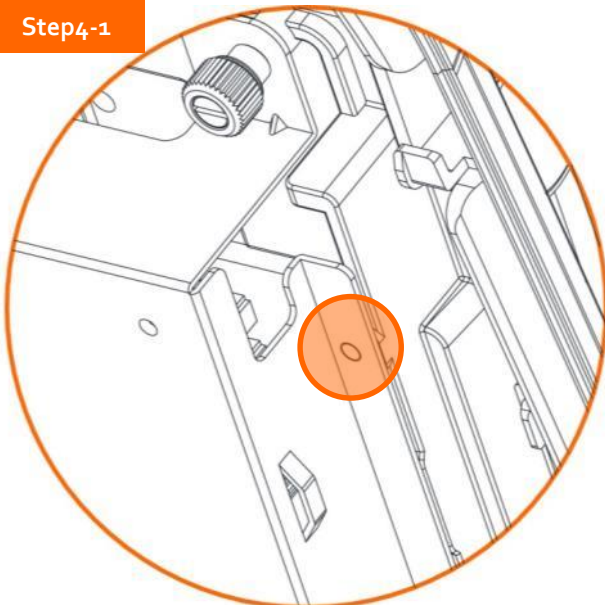


Step4. Turn hand screw and remove Mother board Bracket. (Pull and lift up)

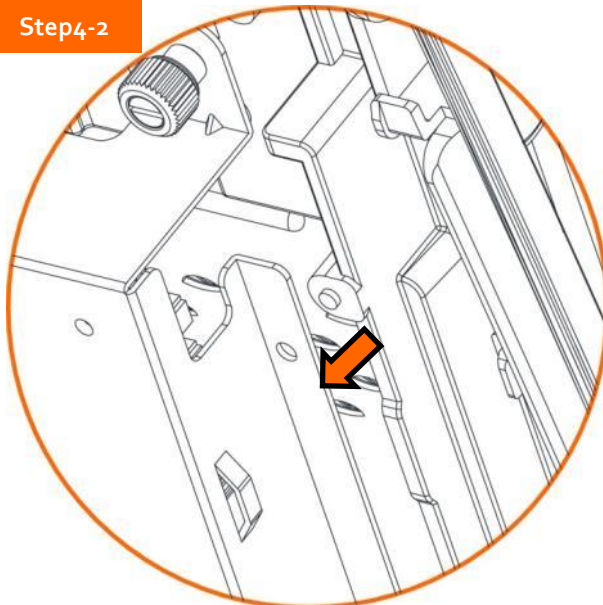
Caution : Look at the frame hook before pull and lift up.

Zoom in

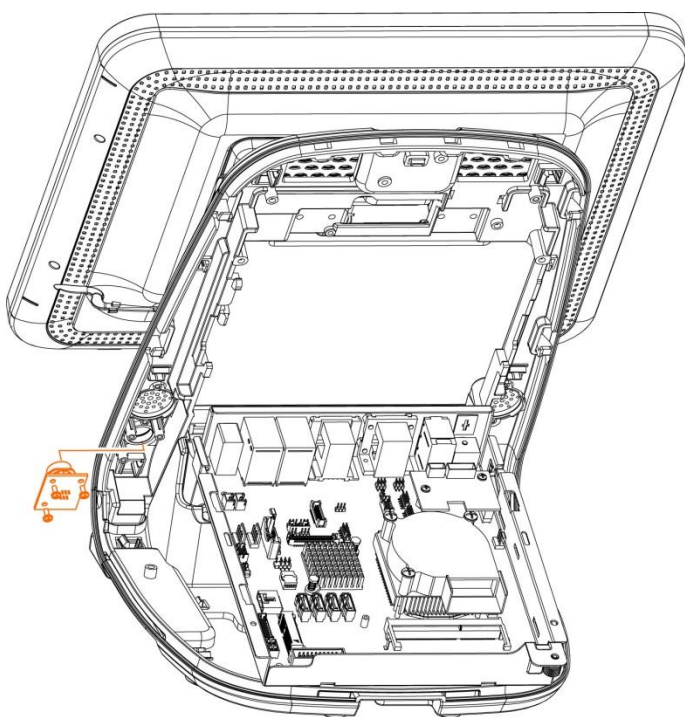
Step4-1



Step4-2

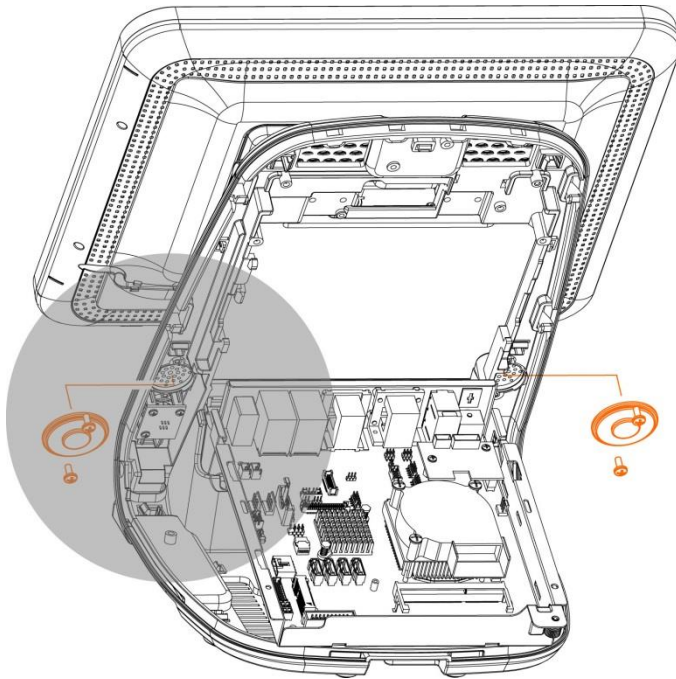


Caution : Look at the frame hook before pull and lift up.

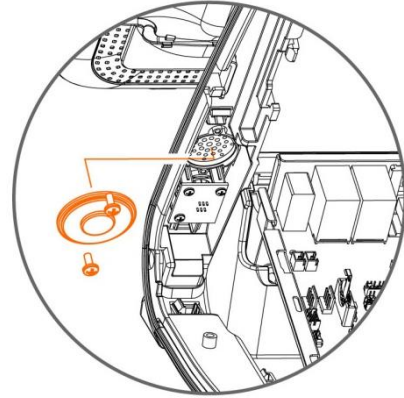


Step5. Remove the Power-switch.

Speaker-Option

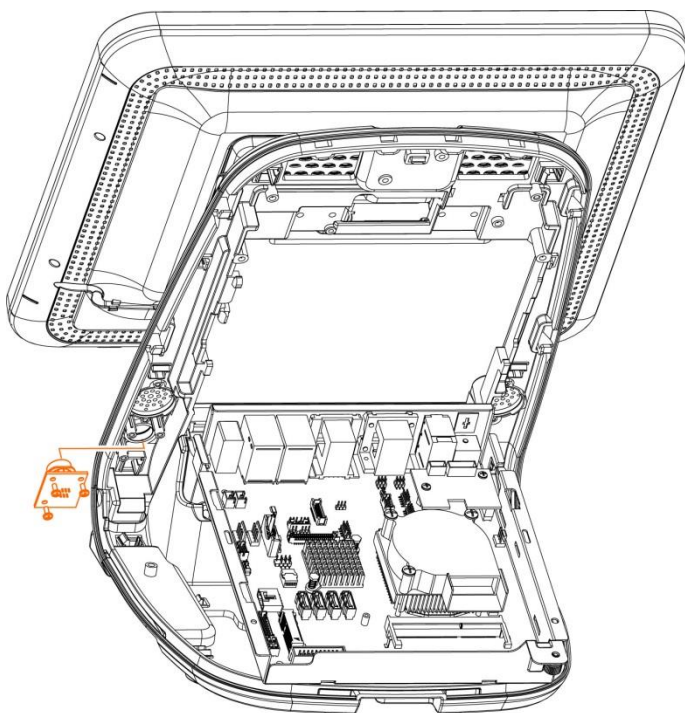


Zoom in

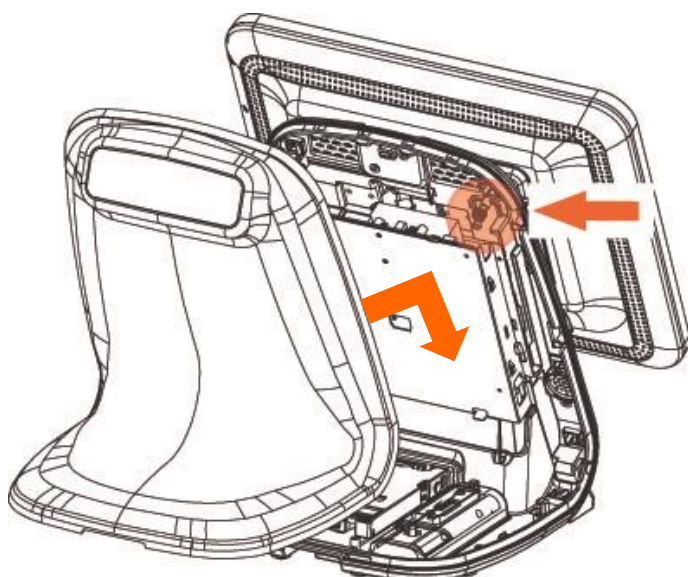


Step6. Assemble 2 Speakers to inner side of body by screws.

Step7. Connect each Mother board Speaker connector to Speaker cable.



Step8. Reassemble the Power-switch.

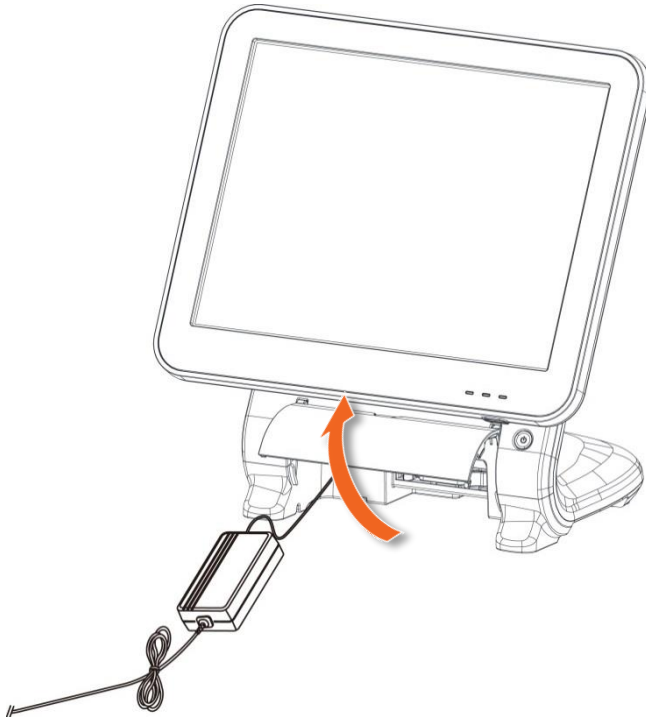


Step9. Assemble the Back cover before
Turn hand screw and assemble
Mother board Bracket. (down and push)

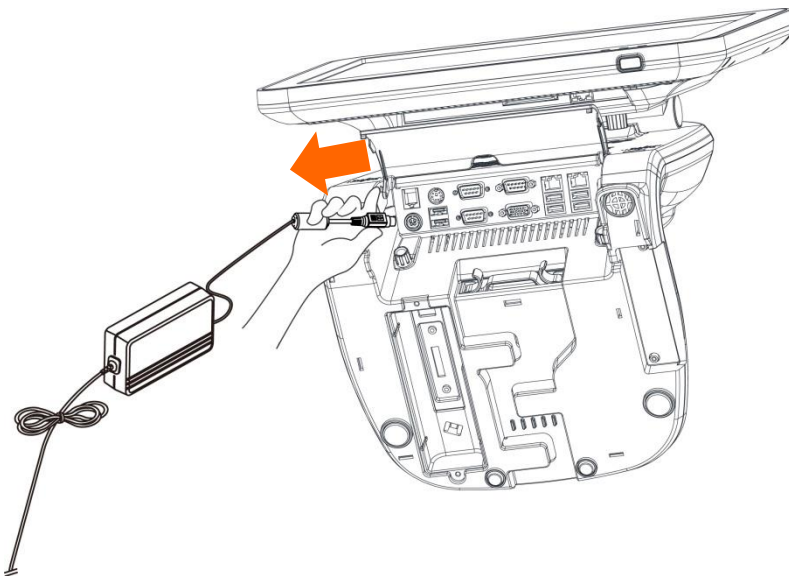
(8) 2nd HDD Module - Option

** Warning: Completely remove power cable when opening main unit or installing optional devices.*

2nd HDD - Option



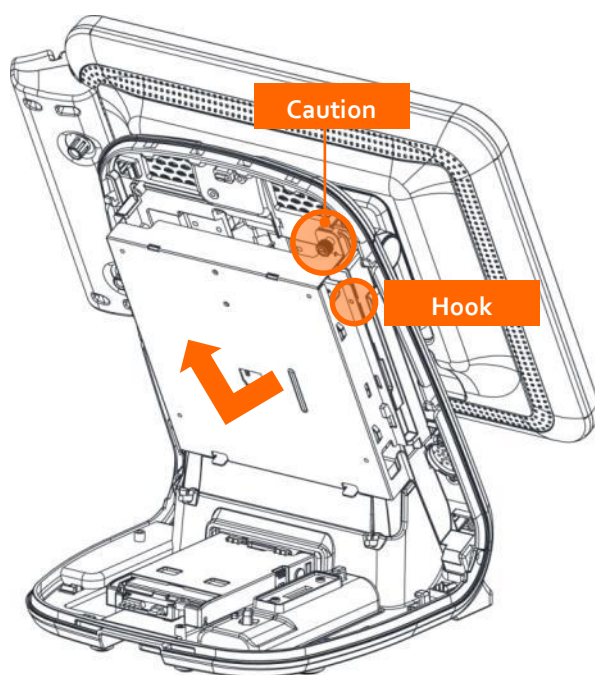
Step1. Please lift up the I/O cover.



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Separating Back cover.

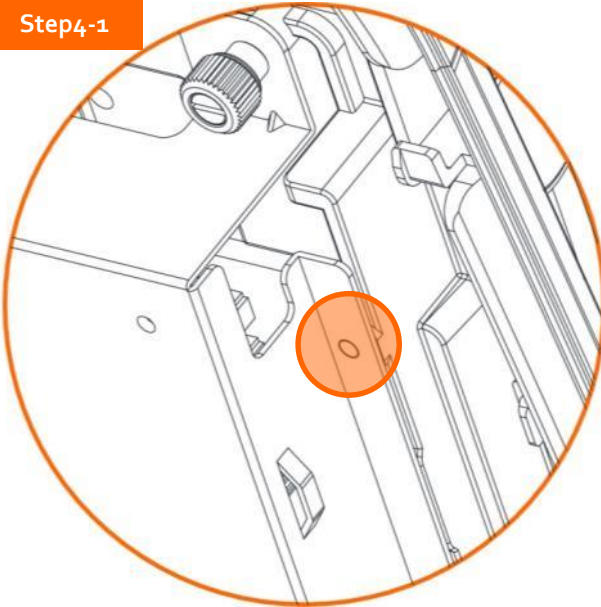


Step4. Turn hand screw and remove Mother board Bracket. (Pull and lift up)

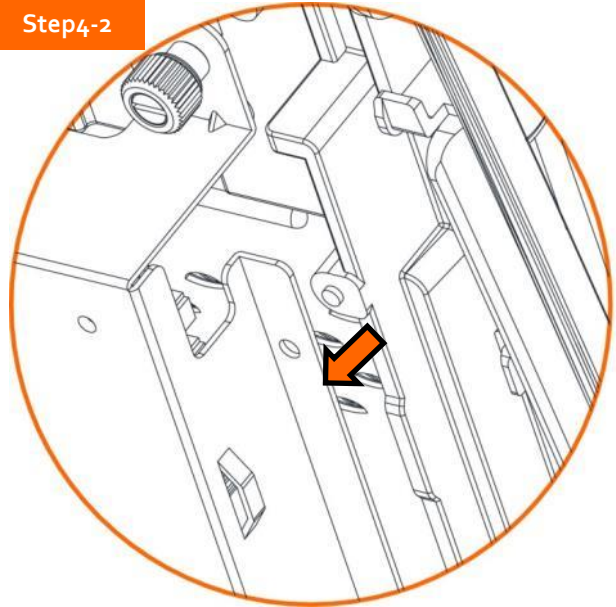
Caution : Look at the frame hook before pull and lift up.

Zoom in

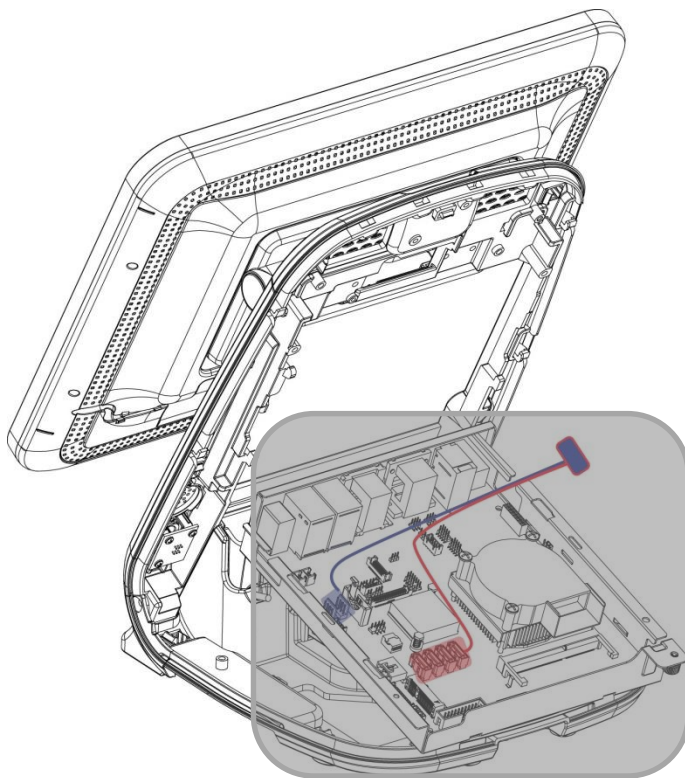
Step4-1



Step4-2



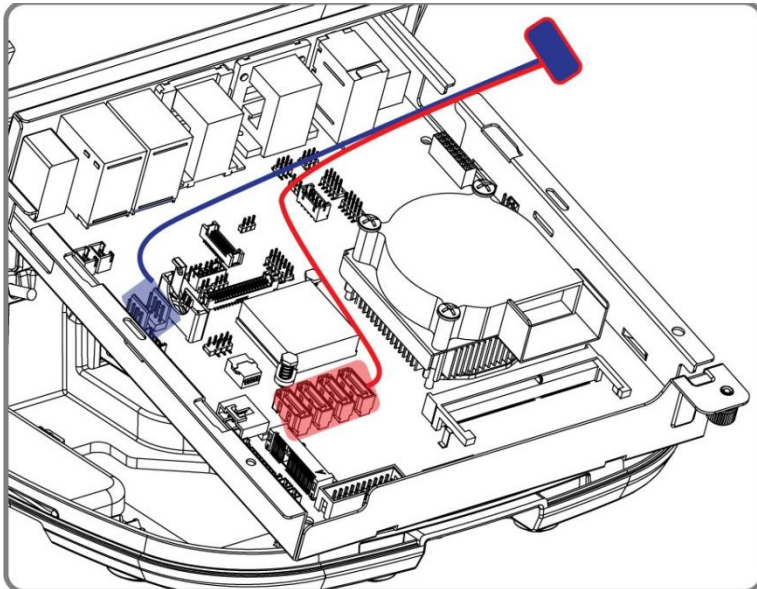
Caution : Look at the frame hook before pull and lift up.



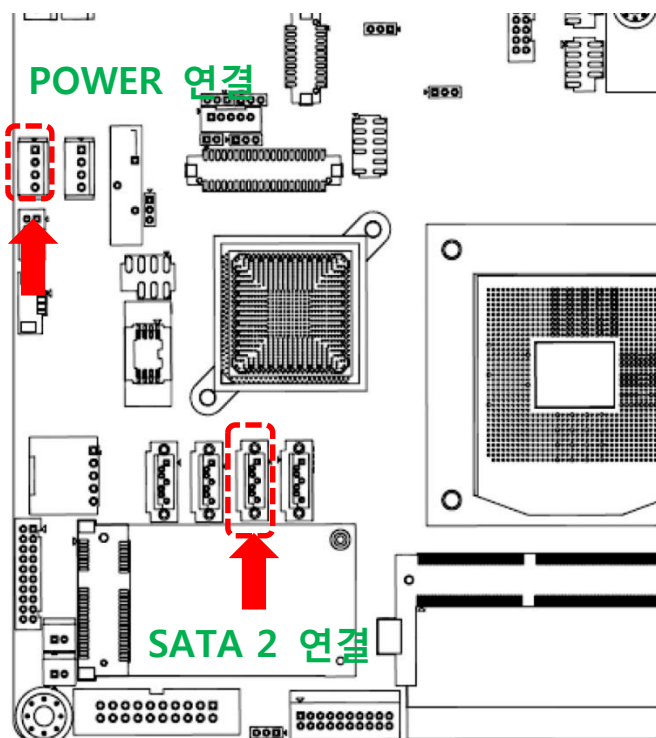
Step5. Put holes in the sample place. (Image reference) and connect smart battery board

Step6. Reassemble Mother board reverse procedure of 'Step2'

Zoom in



Step7. Connect STA Cable to Mother Board.



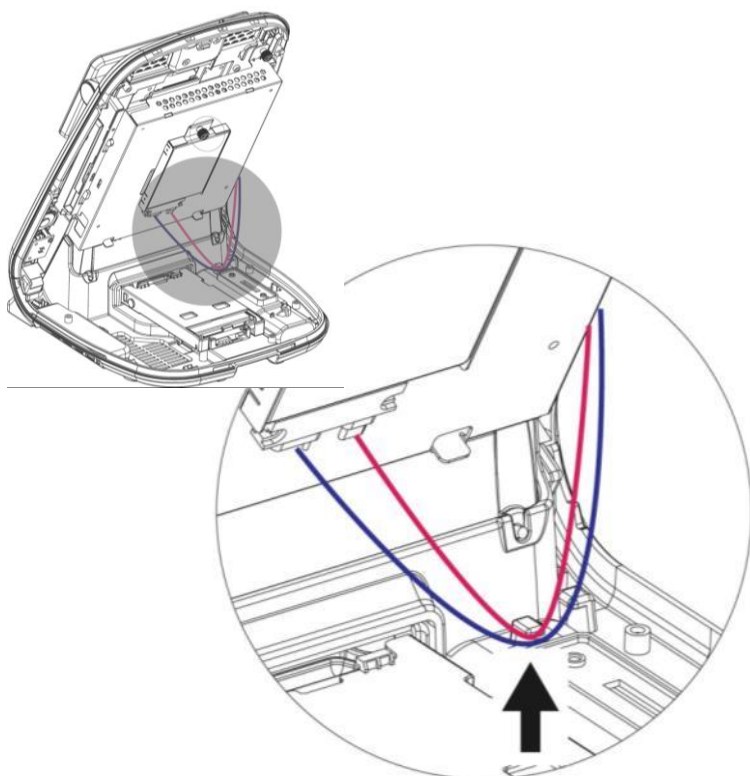
SATA Cable connector position

1 Connector - SATA POWER

2 Connector - SATA DATA

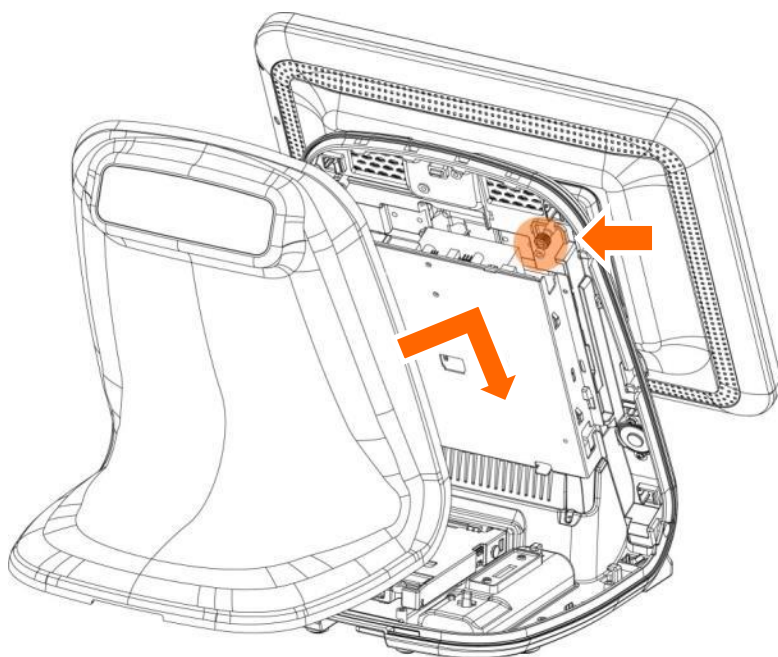
2nd HDD - Option

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Step8. Put back Mother board and connect 2nd HDD to SATA cable.

Step9. Assemble 2nd HDD to back side of Mother board bracket by hand screw.



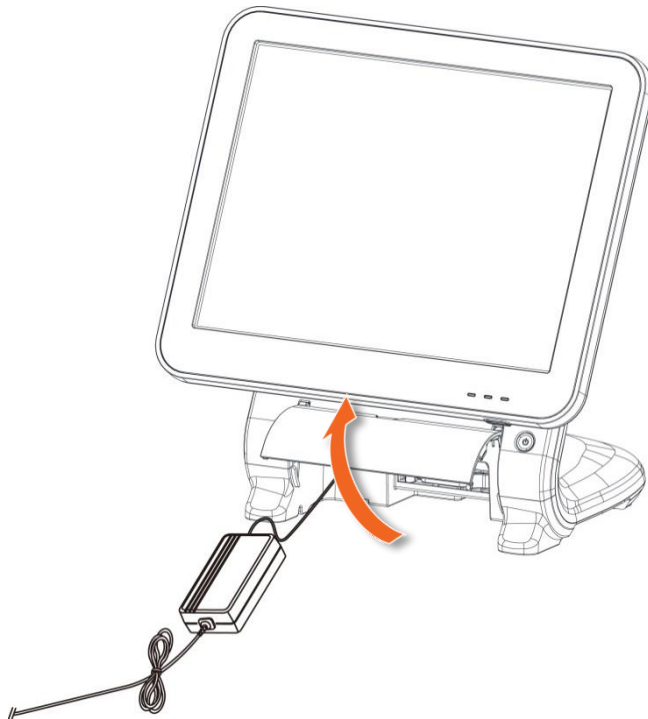
Step10. Assemble the Back cover before Turn hand screw and assemble Mother board Bracket. (down and push)

(9) Memory - Option

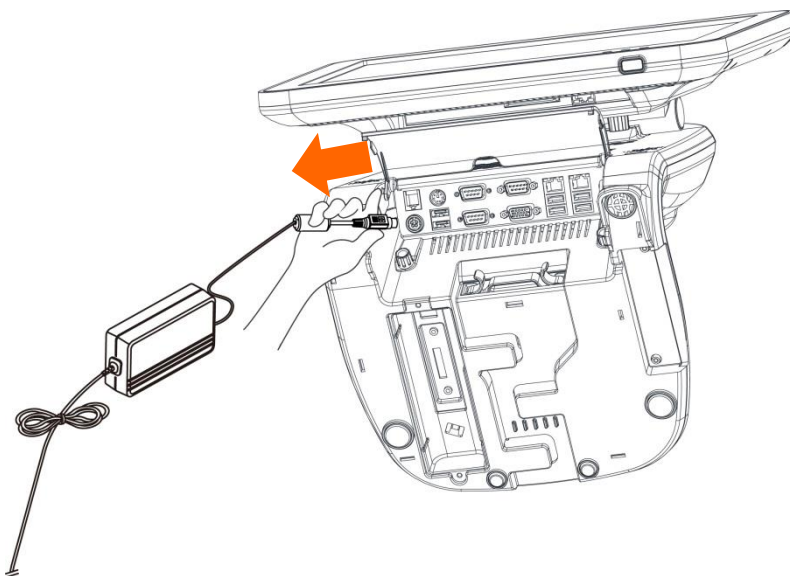
** Warning: Completely remove power cable when opening main unit or installing optional devices.*

Memory -Option

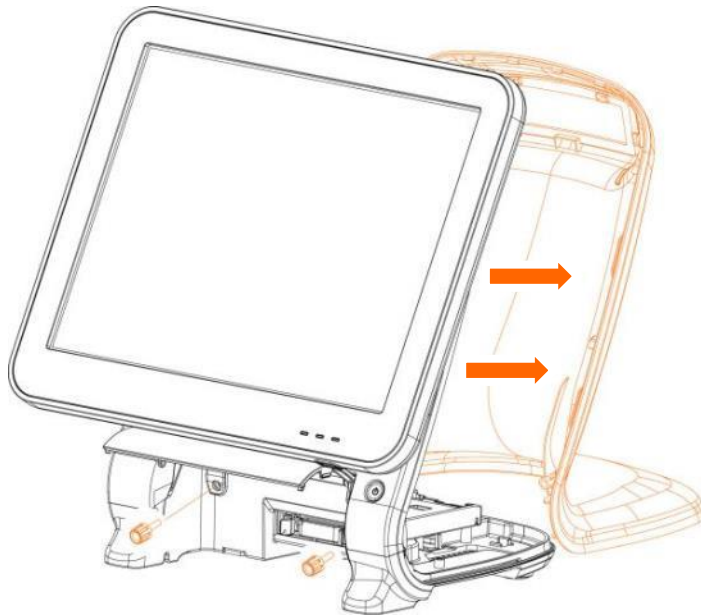
105



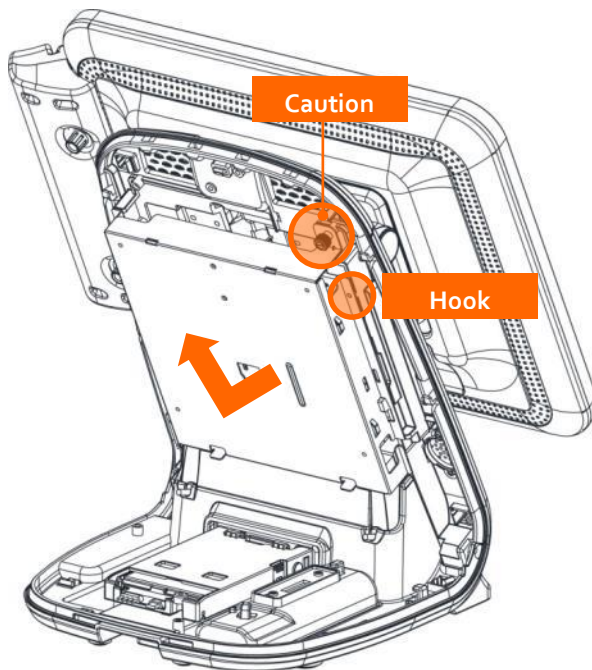
Step1. Please lift up the I/O cover



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Separating Back cover.

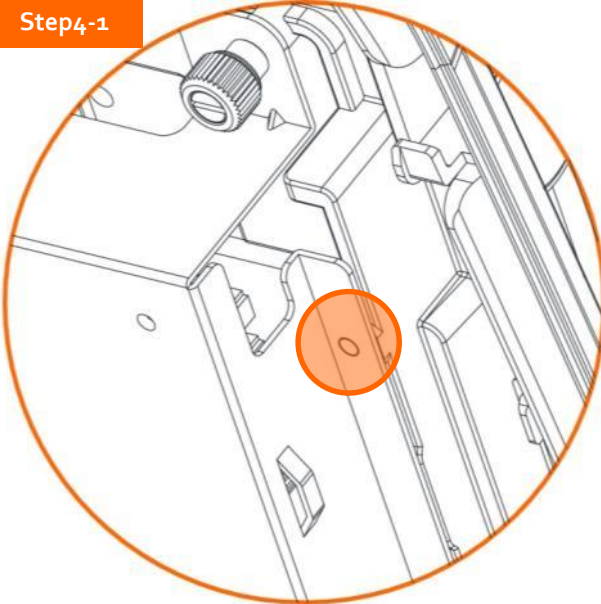


Step4. Turn hand screw and remove Mother board Bracket. (Pull and lift up)

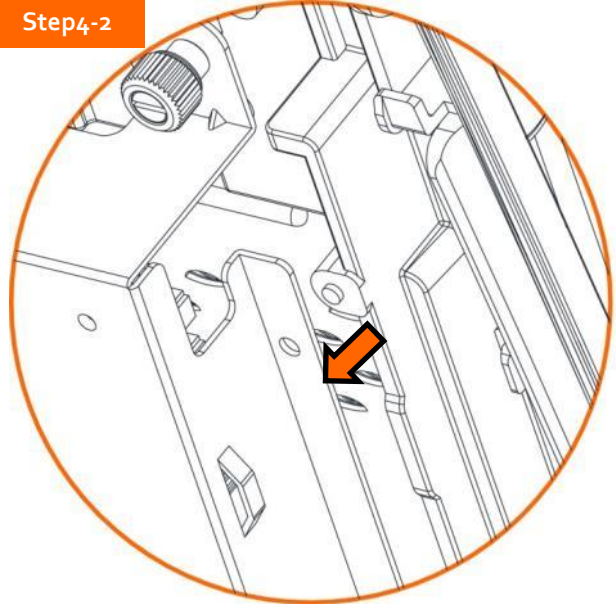
Caution : Look at the frame hook before pull and lift up.

Zoom in

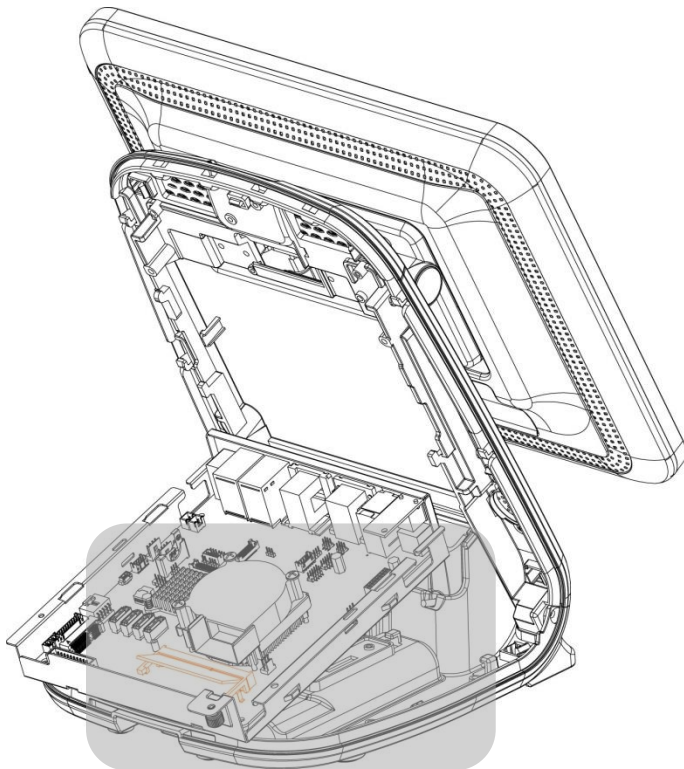
Step4-1



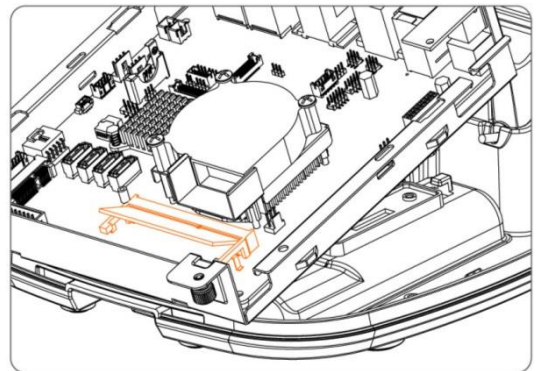
Step4-2



Caution : Look at the frame hook before pull and lift up.

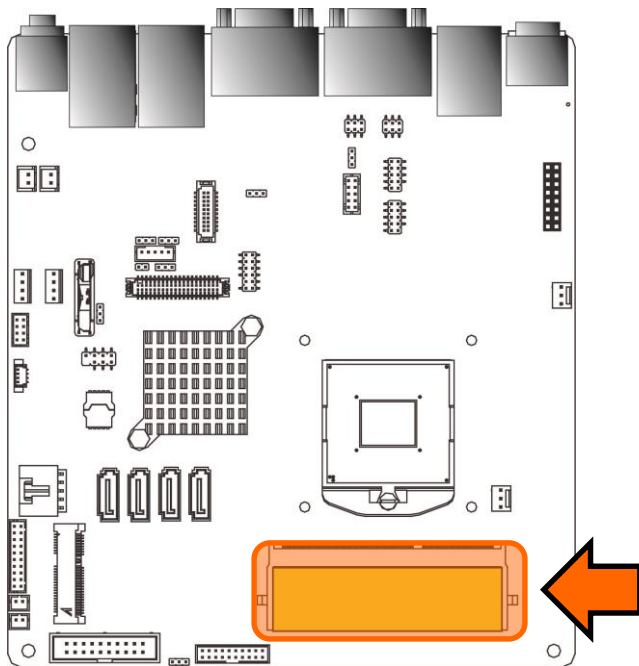


Zoom in

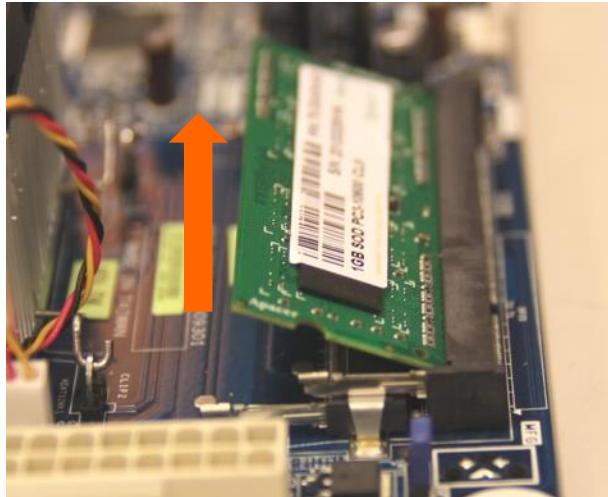


Step5. Place Mother board as in image.
Step6. Install the Memory.

Mother board connect

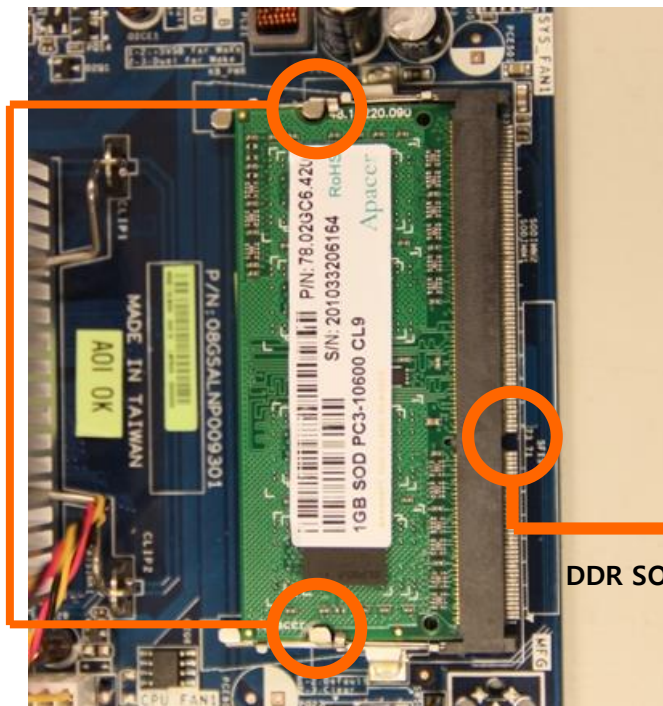


Memory installation position
- 2GB SODIMM RAM(DDR3)

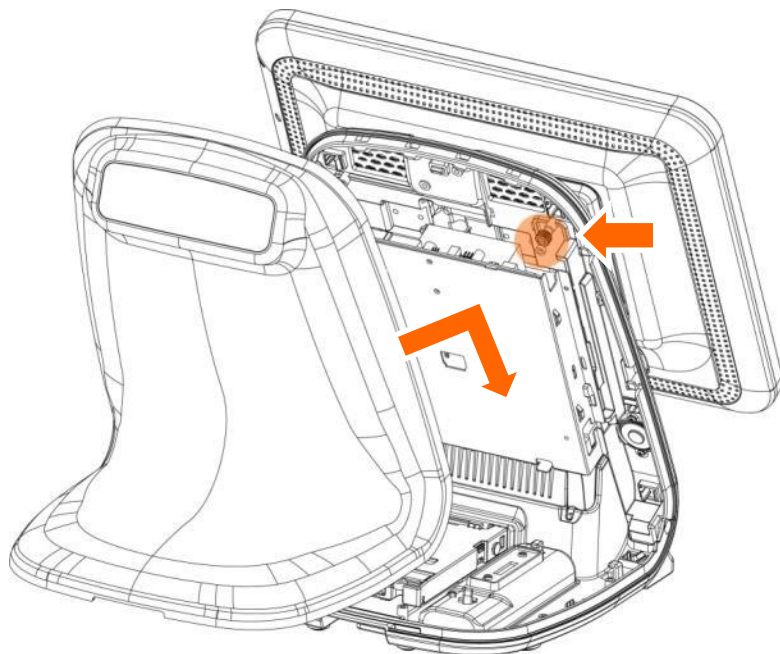


Step 7. Assemble the SODIMM from the socket.

Retaining clip



DDR SODIMM notch



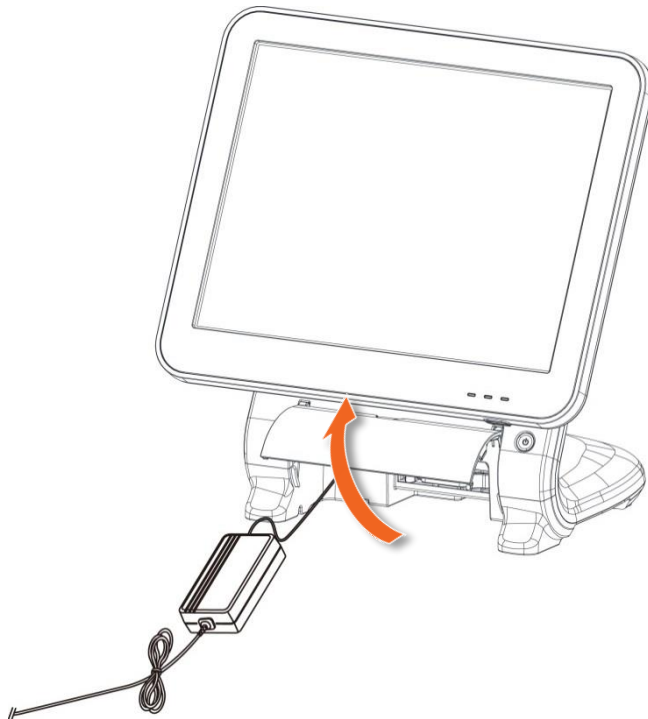
Step8. Assemble the Back cover before
Turn hand screw and assemble
Mother board Bracket. (down and push)

(10) Cash drawer - Option

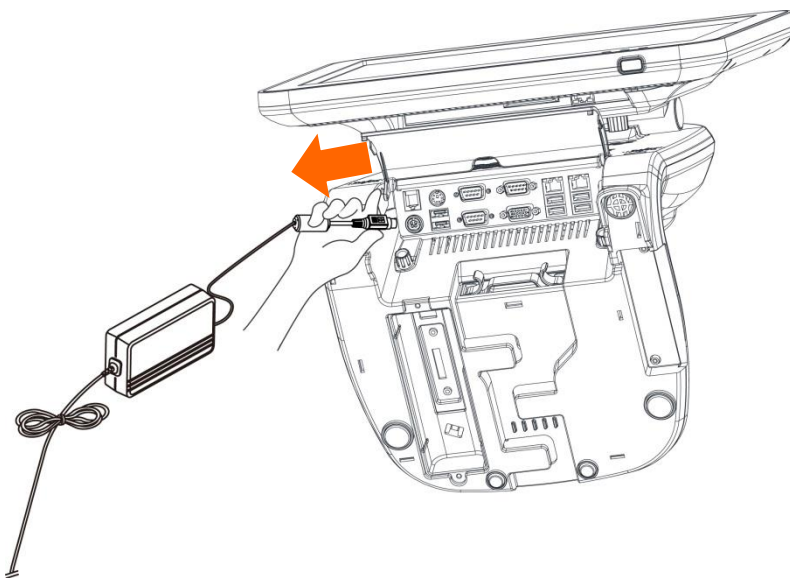
** Warning: Completely remove power cable when opening main unit or installing optional devices.*

Cash drawer - Option

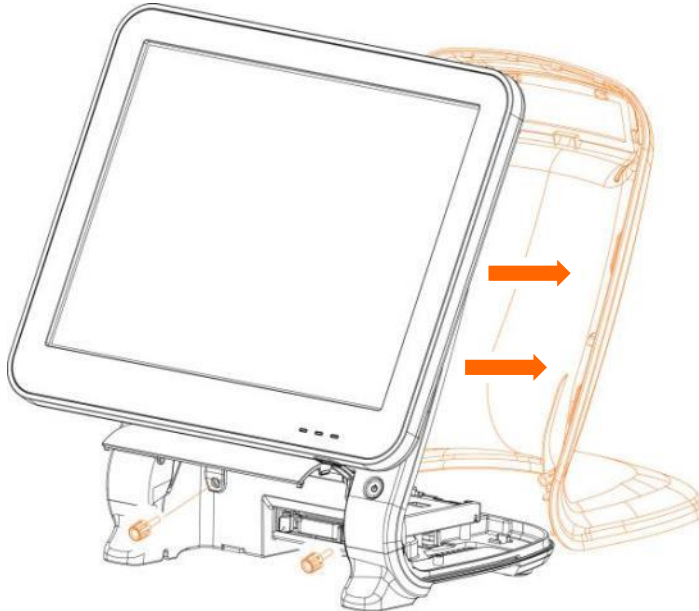
111



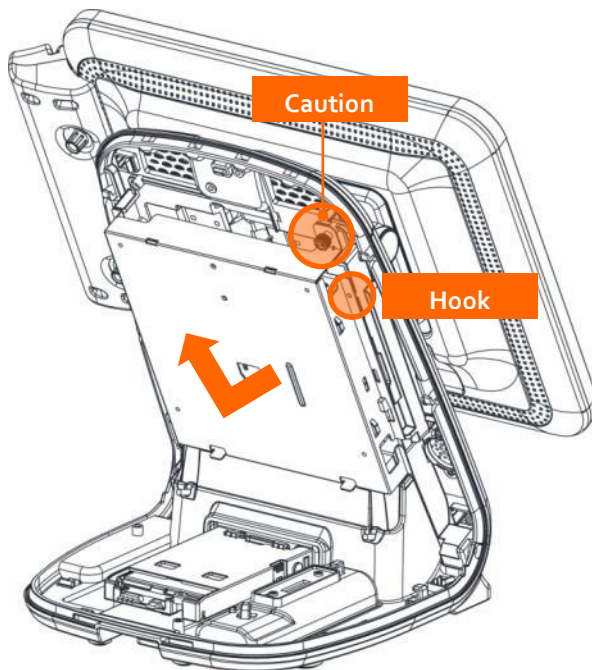
Step1. Please lift up the I/O cover.



Step2. Remove the adapter cable.
Disconnect cap from base of Unit.



Step3. Separating Back cover.

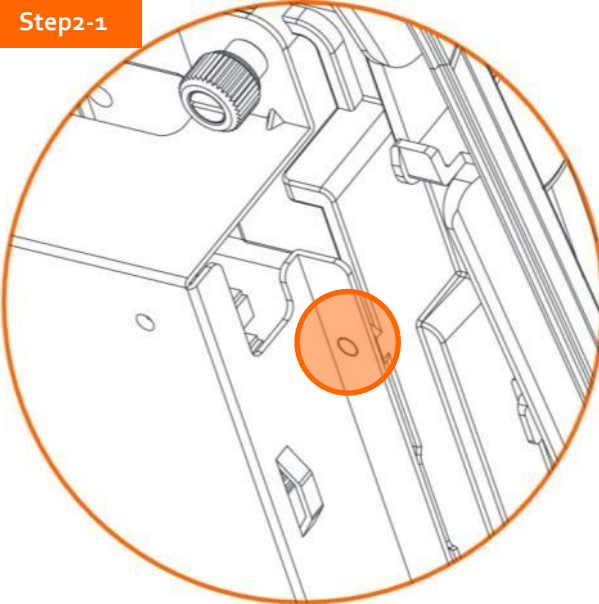


Step4. Turn hand screw and remove Mother board Bracket. (Pull and lift up)

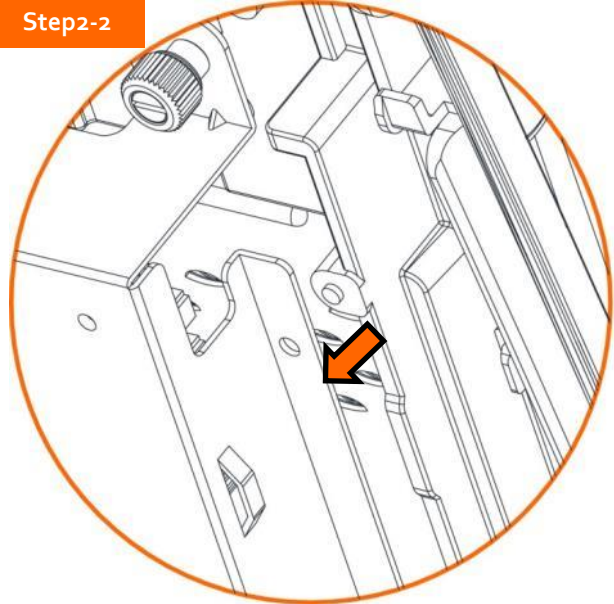
Caution : Look at the frame hook before pull and lift up.

Zoom in

Step2-1

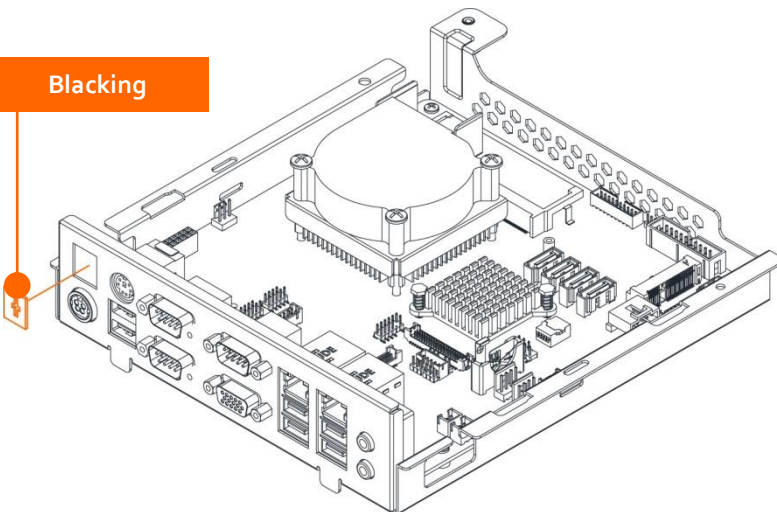


Step2-2

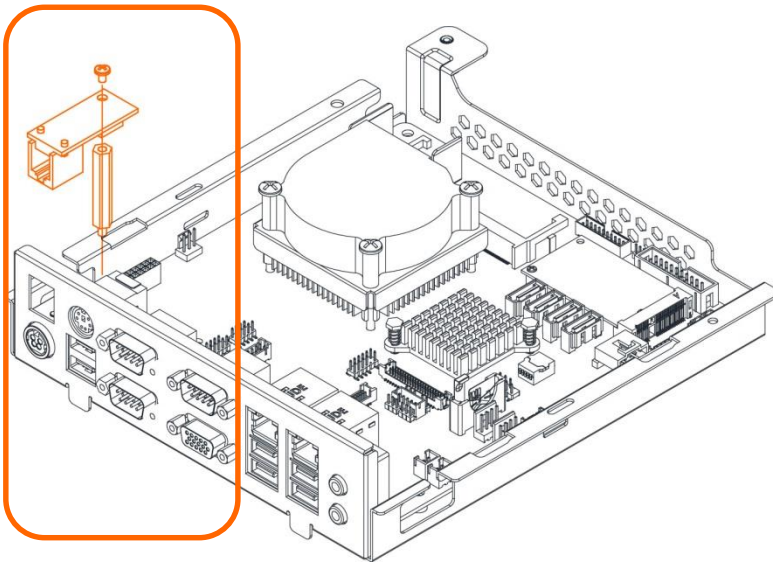


Caution : Turn to one hand screw and Remove the CDP module.

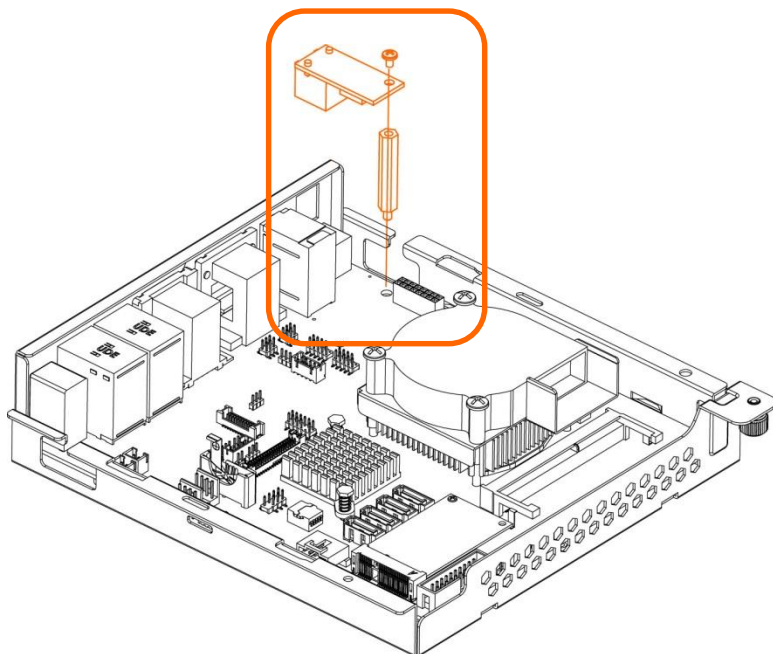
Blanking



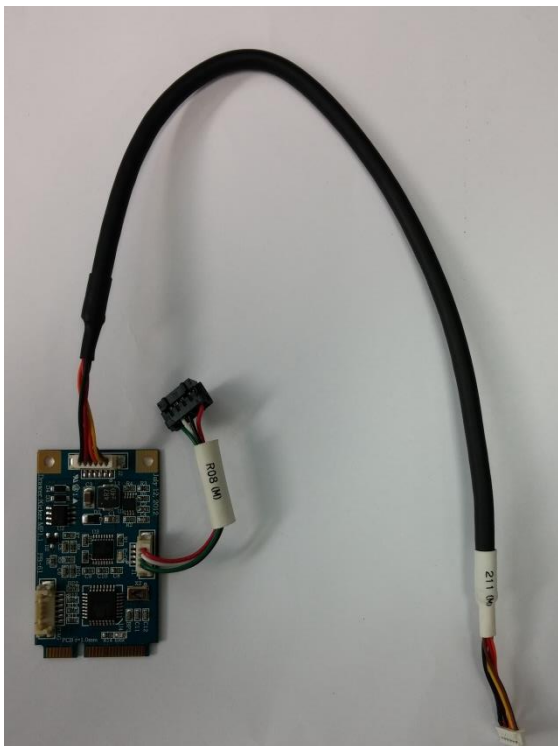
Step5. Use cutter or ripper to remove to bracket blanking.



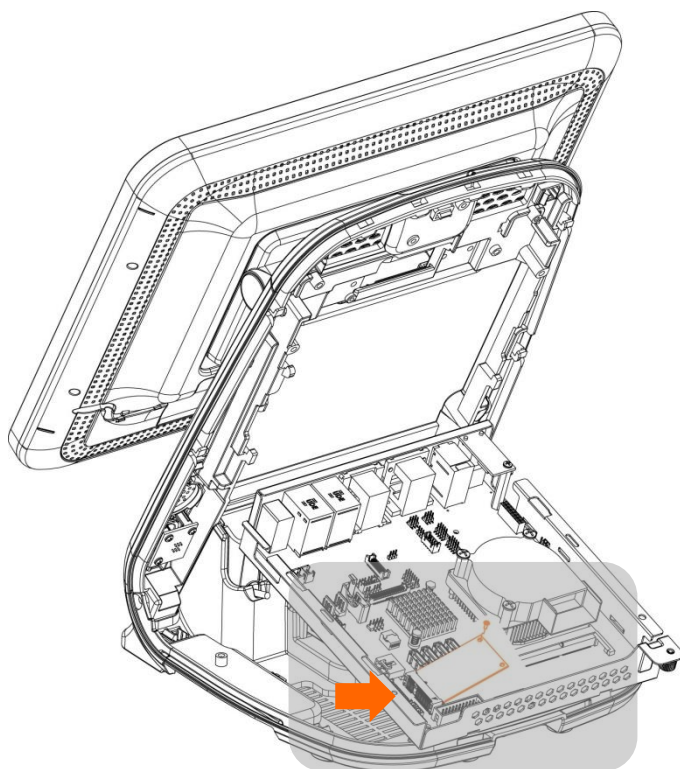
Step6. Assemble a hexa bolt and fasten Screw to cash drawer.



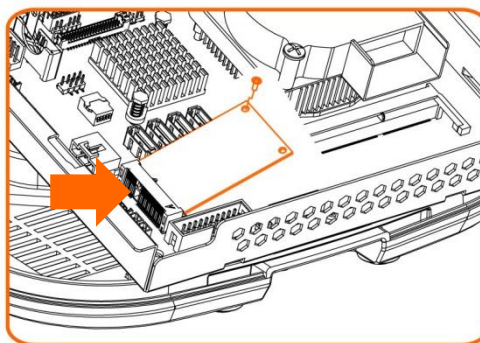
Same image about step4.



Step7. Assemble cable to Mini PCI Board.

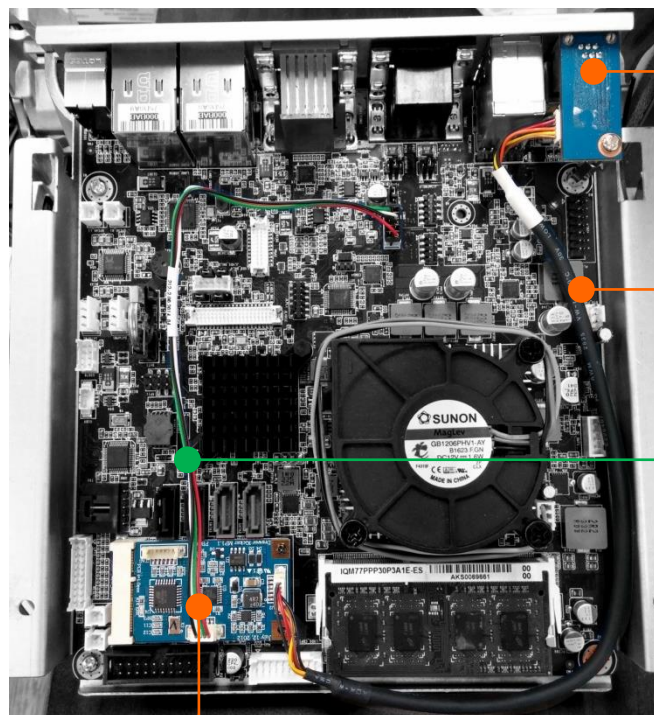


Zoom-in



Step8. Insert Mini PCI Board and fasten two screws..

Cash drawer - Option



Cash drawer

1

NO.1 : Cash drawer to Mini PCI

2

No 2. Mini PCI to Mother board(COM5)

MINI PCI

4. Motherboard

(1) Motherboard Overview

This includes description of the jumpers and connectors on the motherboard.

Warning

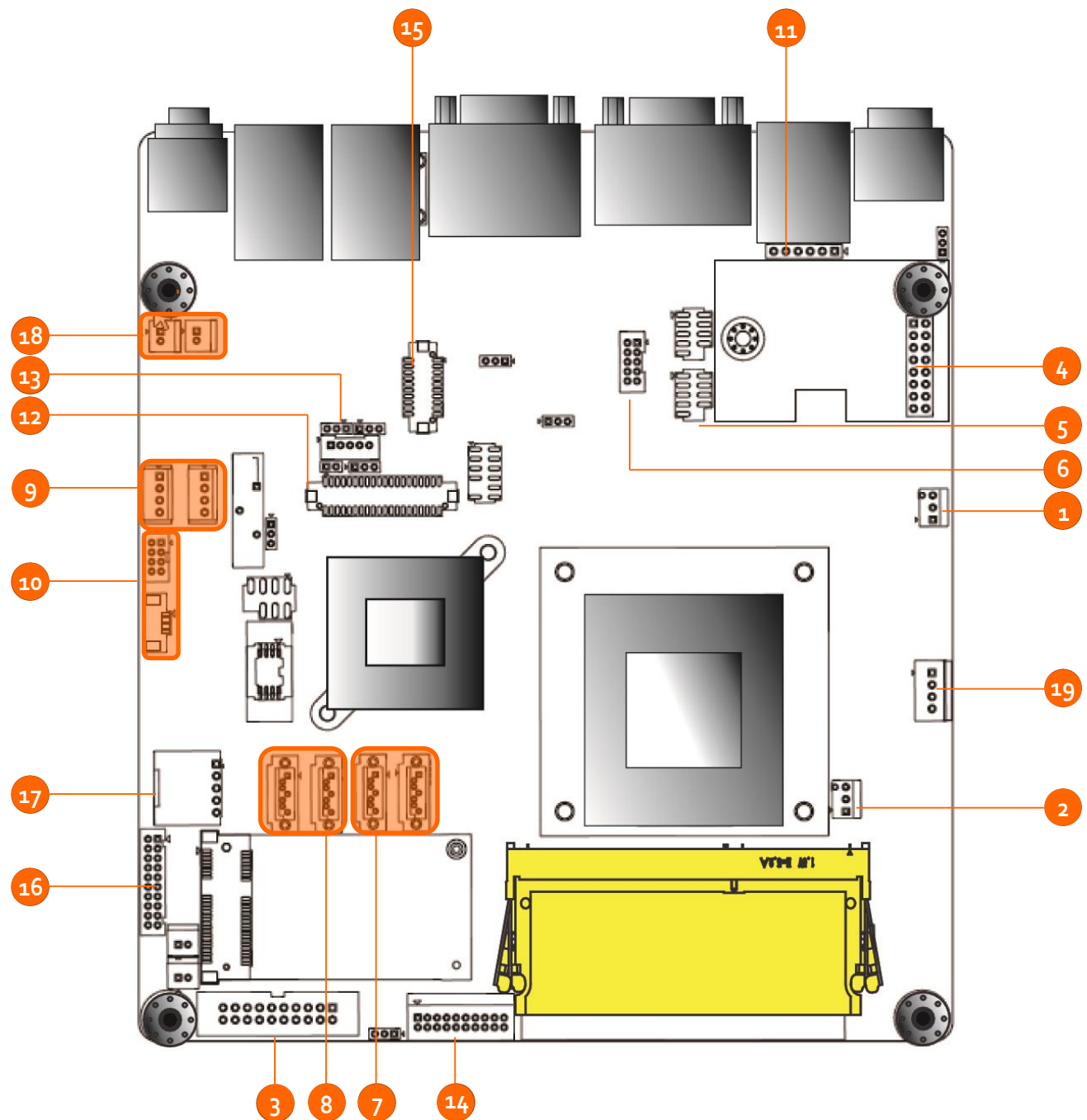
Take note of the following precautions before you install motherboard components or change any motherboard settings.

1. Unplug the power cord from the wall socket before touching any component.
2. Before handling components, use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity.
3. Hold components by the edges to avoid touching the ICs on them.
4. Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that came with the component.
5. Before you install or remove any component, ensure that the ATX power
6. Supply is switched off or the power cord is detached from the power supply. Failure to do so may cause

(2) Motherboard Layout

This includes description of the jumpers and connectors on the motherboard.

Motherboard view



This includes description of the jumpers and connectors on the motherboard.

NO Description		NO Description	
1.	CPU FAN	18.	Speaker Connector (R1, L2)
2.	SYSTEM FAN	19.	DC-Out Connector (DC OUT)
3.	Front Connector		
4.	Smart Battery reserve Connector		
5.	Serial Port Connector (COM4, COM6)		
6.	Serial Port Connector (COM5)		
7.	Serial ATA 3 Connector (SATA1, SATA2)		
8.	Serial ATA 3 Connector (SATA3, SATA4)		
9.	Serial ATA 3 Connector (SATAW3, SATAW4)		
10.	USB Connector (USB7,8, USB9)		
11.	Keyboard / Mouse Connector(KBMS2)		
12.	LVDS1 Connector (JLVDS1)		
13.	LVDS Backlight Connector (JBKL1)		
14.	LVDS2 Connector (LVDS_CDP1)		
15.	VGA2 Connector (VGA2)		
16.	Parallel Port Connector (LPT1)		
17.	External Touch Controller Connector (TS1)		

(3) Jumpers

Clear CMOS (CMOS₁)

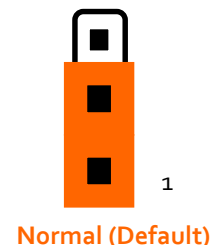
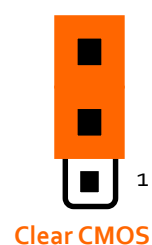
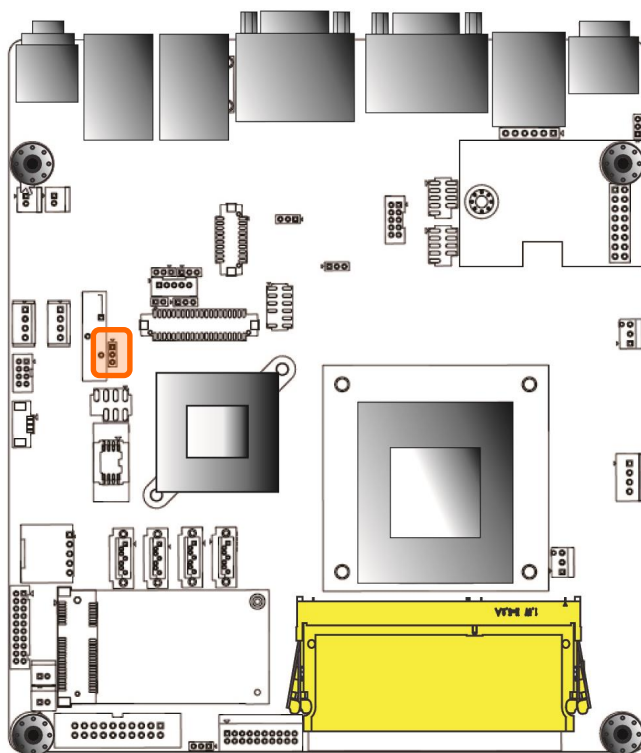
This jumper allows you to clear the Real Time Clock (RTC) RAM in CMOS. You can clear the CMOS memory of date, time, and system setup parameters by erasing the CMOS RTC RAM data. The onboard button cell battery powers the RAM data in CMOS, which includes system setup information such as system passwords.

To erase the RTC RAM:

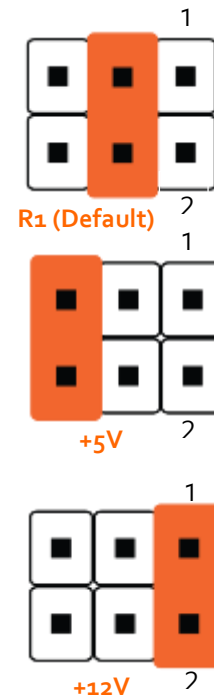
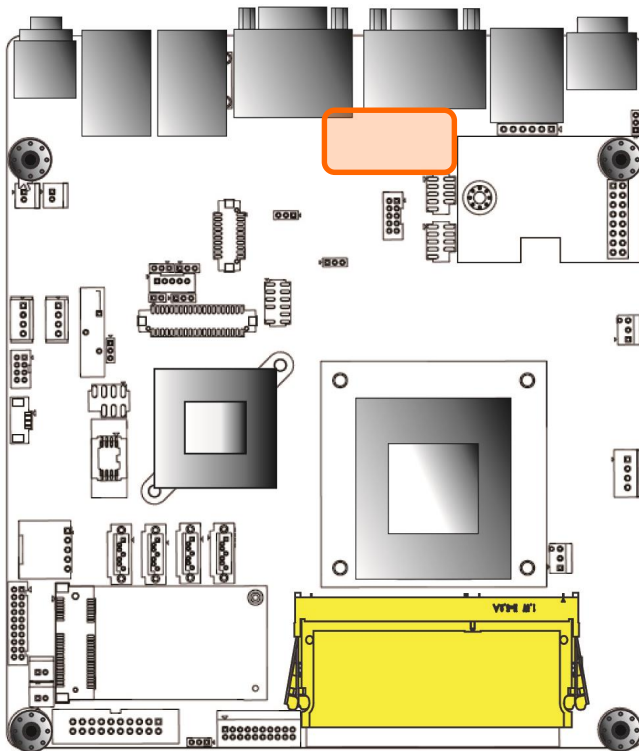
1. Turn OFF the computer and unplug the power cord.
2. Remove the onboard battery.
3. Move the jumper cap from pins 1-2 (default) to pins 2-3. Keep the cap on pins 2-3 for about 5~10 second, then move the cap back to pins 1-2.
4. Re-install the battery.
5. Plug the power cord and turn ON the computer.
6. Hold down the key during the boot process and enter BIOS setup to re-enter data

CAUTION: Except when clearing the RTC RAM, never remove the cap on CLRTC jumper default position. Removing the cap will cause system boot failure!

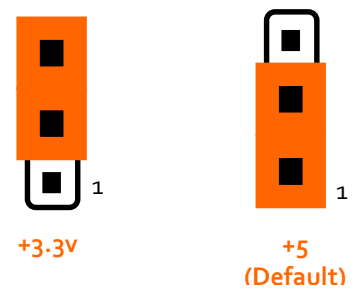
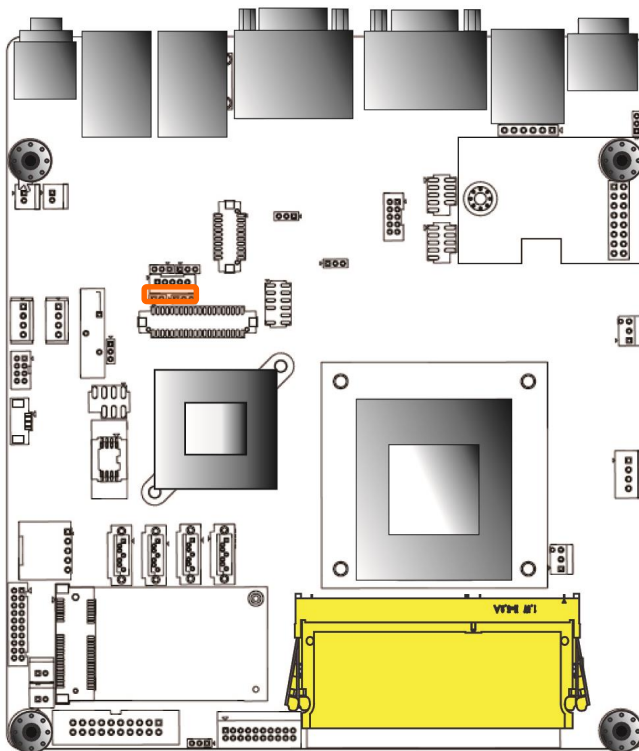
1. Clear CMOS (CMOS₁)



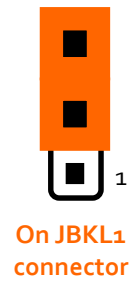
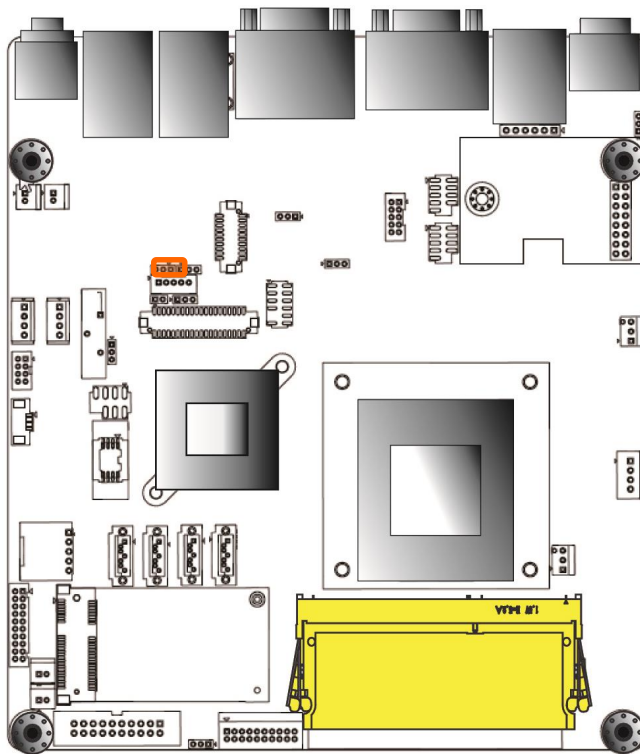
2.COM1, COM2, RI/+5V/+12V Select (JCOMPWR1A / JCOMPWR1B)



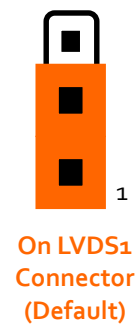
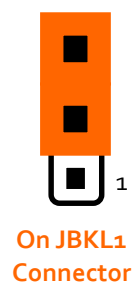
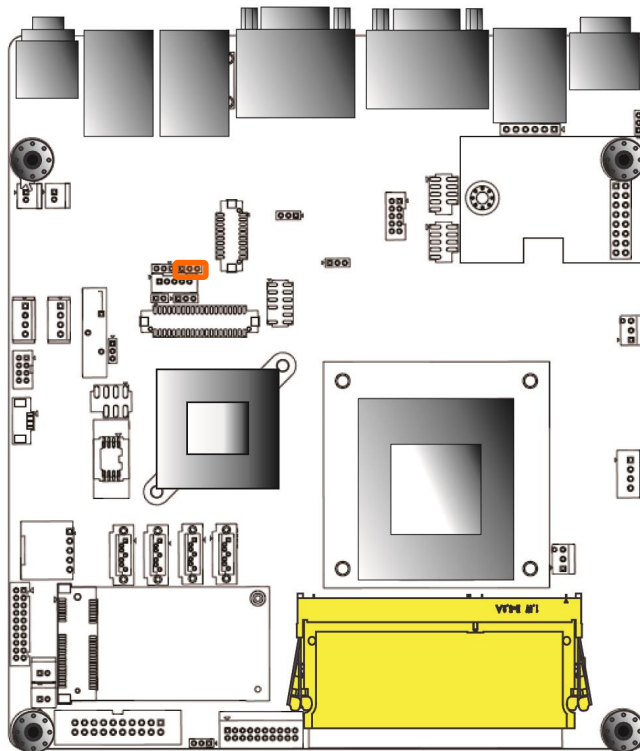
3. LVDS Backlight control power selection (JLVDS_BKL1)



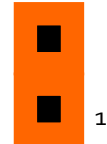
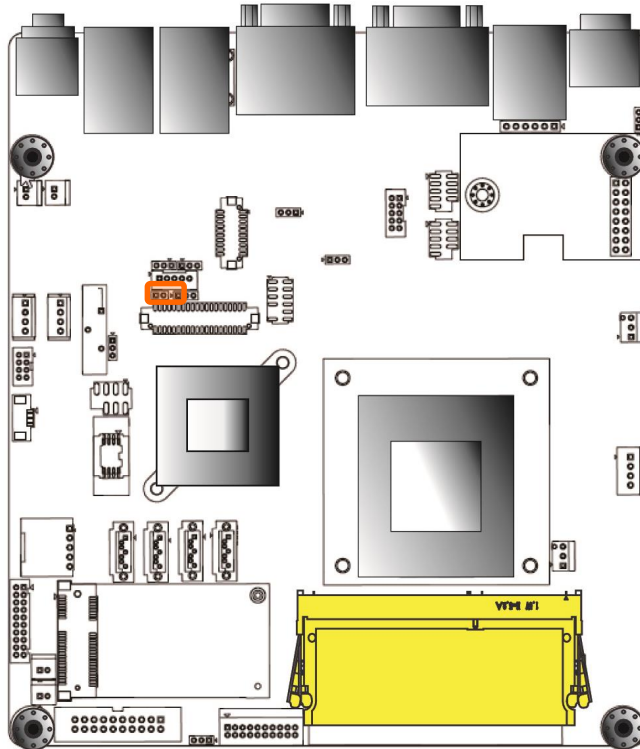
4. LVDS Backlight Enable control selection (JLVDS_BKL3)



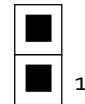
5. LVDS Brightness control selection (JLVDS_BKL4)



6. Onboard Touch function Enable/Disable selection(USB_SEL)

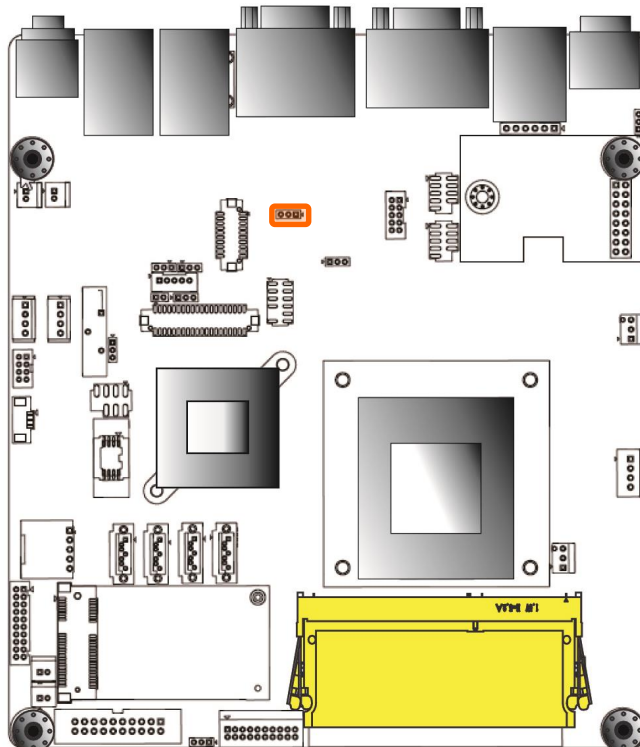


PWM Mode
(Default)



Linear Mode

7. VGA2 power selection (JVGA2)

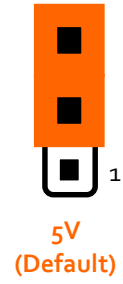
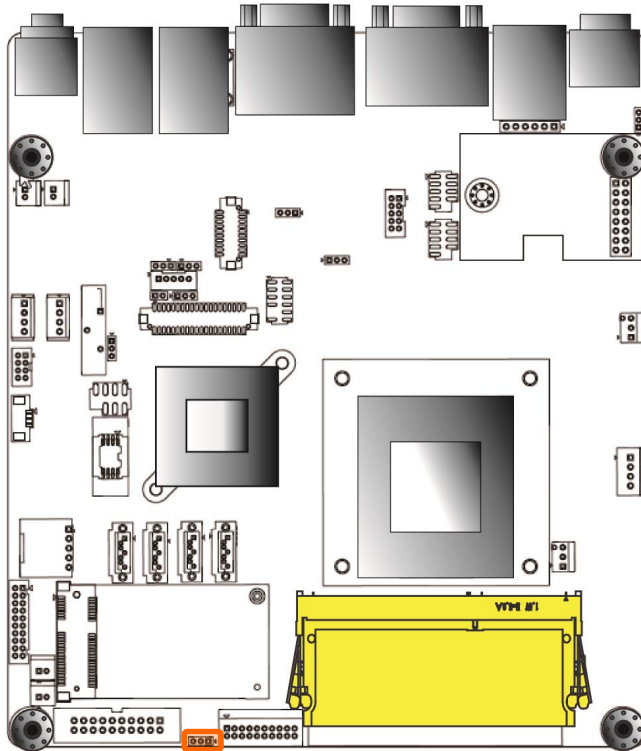


5V
(Default)



12V

8. LVDS2 power selection (LVDS_P2)



5. BIOS Setup Utility

* This chapter tells how to change the system settings through the BIOS Setup menus. Detailed descriptions of the BIOS parameters are also provided.

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(1) BIOS setup program

This motherboard supports a programmable firmware chip that you can update using the provided utility. Use the BIOS Setup program when you are installing a motherboard, reconfiguring your system, or prompted to "Run Setup." This section explains how to configure your system using this utility.

Even if you are not prompted to use the Setup program, you can change the configuration of your computer in the future. For example, you can enable the security password feature or change the power management settings. This requires you to reconfigure your system using the BIOS Setup program so that the computer can recognize these changes and record them in the CMOS RAM of the firmware hub.

The firmware hub on the motherboard stores the Setup utility. When you start up the computer, the system provides you with the opportunity to run this program. Press during the Power-On-Self-Test (POST) to enter the Setup utility; otherwise, POST continues with its test routines.

If you wish to enter Setup after POST, restart the system by pressing <Ctrl+Alt+Delete>, or by pressing the reset button on the system chassis. You can also restart by turning the system off and then back on. Do this last option only if the first two failed.

The Setup program is designed to make it as easy to use as possible. Being a menu-driven program, it lets you scroll through the various sub-menus and make your selections from the available options using the navigation keys.

-
- The default BIOS settings for this motherboard apply for most conditions to ensure optimum performance. If the system becomes unstable after changing any BIOS settings, load the default settings to ensure system compatibility and stability. Select the Load Optimized Defaults from the BIOS menu screen.
 - The BIOS setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen.
-

1.1 Legend Box

The keys in the legend bar allow you to navigate through the various setup menus.

Key(s)	Function Description
←,→	Select Screen
↑,↓	Select Item
Enter	Select
+,-	Change Option / Field
F1	General Help
F2	Previous Value
F3	Optimized Defaults
F4	Save and Exit
ESC	Exit

1.2 List Box

This box appears only in the opening screen. The box displays an initial list of configurable items in the menu you selected.

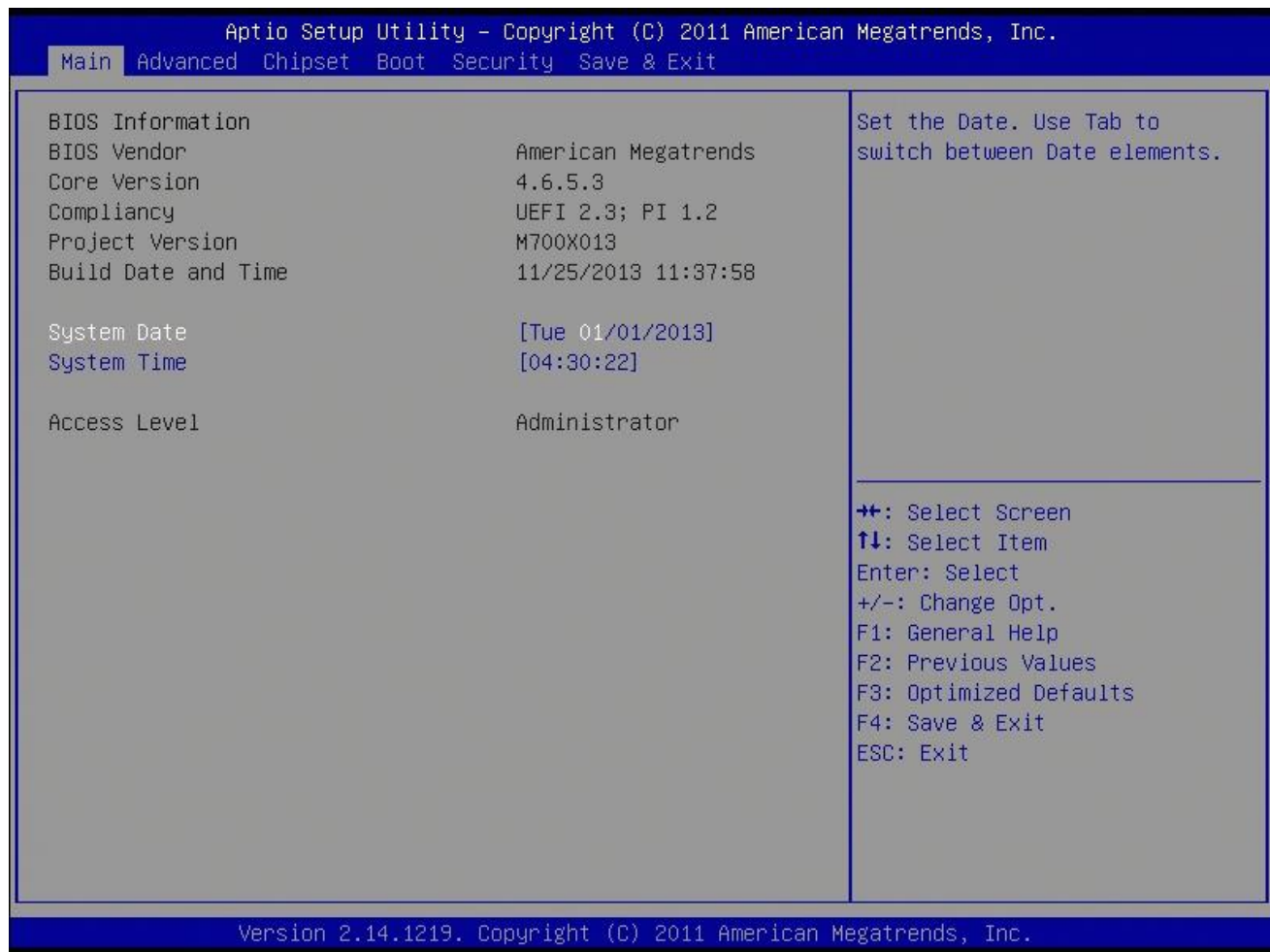
1.3 Sub-menu

Note that a right pointer symbol (►) appears to the left of certain fields. This pointer indicates that you can display a sub-menu from this field. A sub-menu contains additional options for a field parameter. To display a sub-menu, move the highlight to the field and press <Enter>. The sub-menu appears. Use the legend keys to enter values and move from field to field within a sub-menu as you would within a menu. Use the <Esc> key to return to the main menu.

Take some time to familiarize yourself with the legend keys and their corresponding functions. Practice navigating through the various menus and submenus. If you accidentally make unwanted changes to any of the fields, press <F6> to load the fail-safe default values. While moving around through the Setup program, note that explanations appear in the Item Specific Help window located to the right of each menu. This window displays the help text for the currently highlighted field.

2.2 Main Setup

This menu gives you an overview of the general system specifications. The BIOS automatically detects the items in this menu. Use this menu for basic system configurations, such as time, date etc.



1. System Language

English

2. System Time

The time format is <Hour>,<Minute>,<Second>.

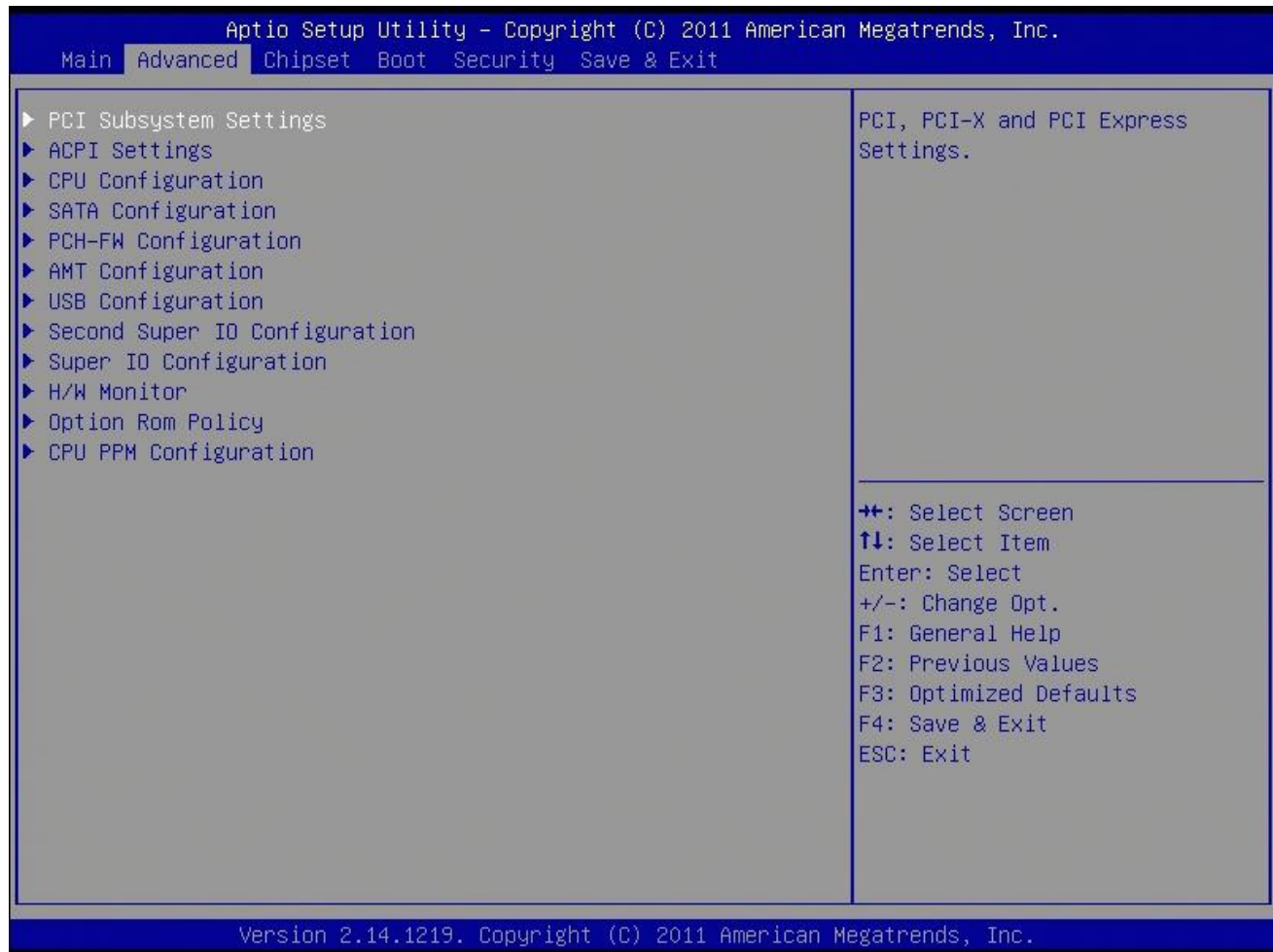
3. System Date

The date format is <Date>,<Month>,<Day>,<Year>.

2.3 Advanced BIOS Setup

Select the Advanced tab from the setup screen to enter the Advanced BIOS Setup screen.

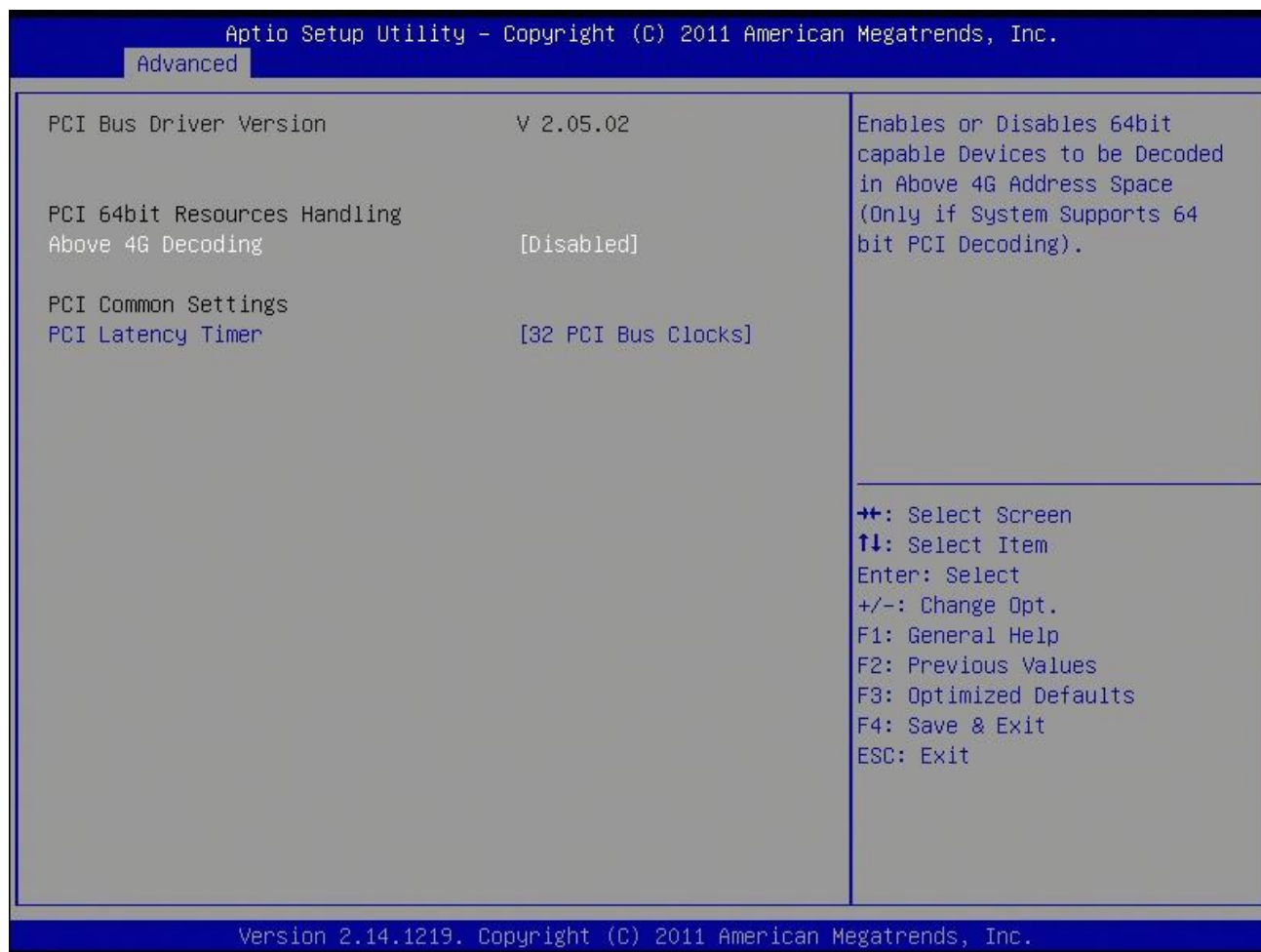
You can select any of the items in the left frame of the screen, such as Chipset configuration, to go to the sub menu for that item. You can display an Advanced BIOS Setup option by highlighting it using the <Arrow> keys. All Advanced BIOS Setup options are described in this section. The Advanced BIOS Setup screen is shown below. The sub menus are described on the following pages.



Take caution when changing the settings of the Advanced menu items. Incorrect field values can cause the system to malfunction.

2.3-1. PCI Subsystem Setting

The PCI PnP menu items allow you to change the advanced settings for PCI/PnP devices. The menu includes setting IRQ and DMA channel resources for either PCI/PnP.



- **Above 4G Decoding [Disabled]**

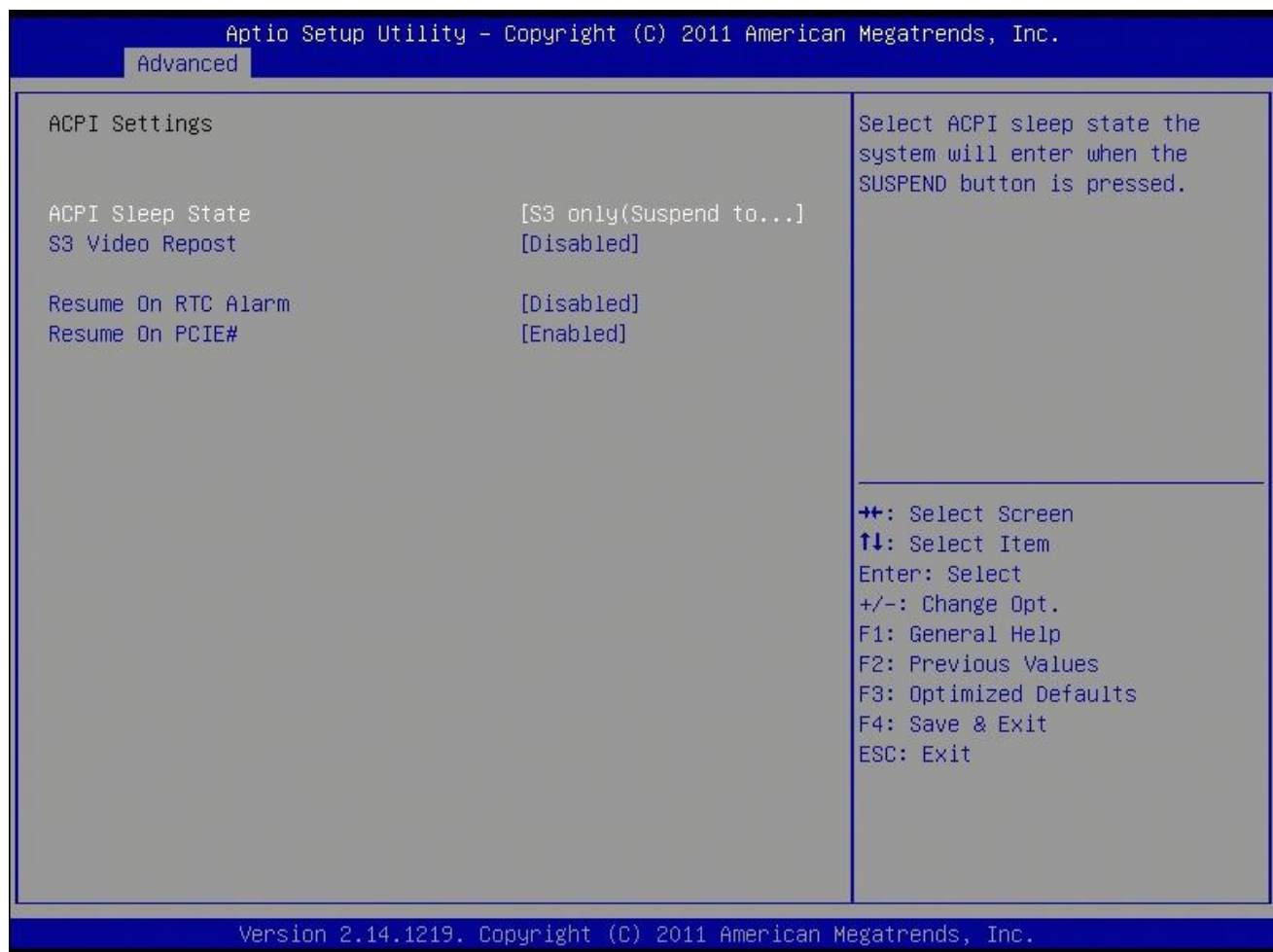
Configuration options:[Enable][Disable]

- **PCI Latency Timer [32 PCI Bus Clocks]**

Allows the PCI Latency Timer to be adjusted. This option sets the latency of all PCI devices on the PCI bus.

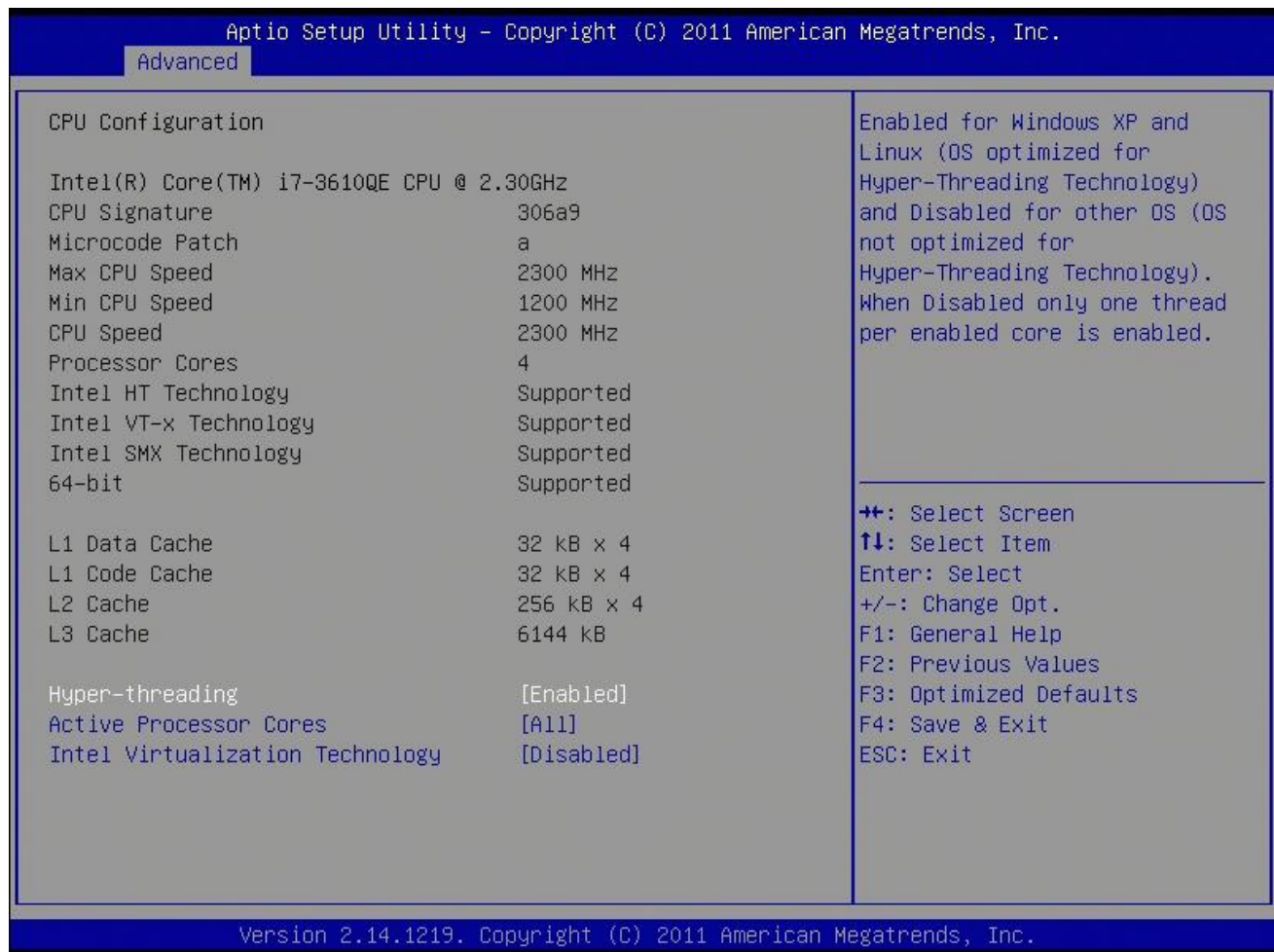
Configuration options: [32 PCI Bus Clocks] [64 PCI Bus Clocks] [96 PCI Bus Clocks] [128 PCI Bus Clocks] [160 PCI Bus Clocks] [192 PCI Bus Clocks] [224 PCI Bus Clocks] [248 PCI Bus Clocks]

2.3-2. ACPI Settings



- **ACPI Sleep State [S3 (suspend to RAM)]**
 Select the highest ACPI sleep state the system will enter the SUSPEND button is press. Configuration options: [Suspend Disable][S1 (CPU Stop Clock)] [S3 (suspend to RAM)]
- **S3 Video Repost [Disabled]**
 Configuration options: [Disabled] [Enabled]
- **Resume On RTC Alarm [Disabled]**
 Enable or disable system wake on alarm even. When enabled, system will wake upon the hr/min/sec specified.
 Configuration options: [Disabled] [Enabled]
- **Resume On PCIE [Enabled]**
 Configuration options: [Disabled] [Enabled]

2.3-3. CPU Configuration



- **CPU configuration**
Displays the CPU information
- **Hyper-threading [Enabled]**
Enable or disable Hyper-threading support.
Configuration options: [Disabled] [Enabled]
- **Active Processor Cores [All]**
Select the numbers of cores in each processor package.
Configuration options: [All] [1] [2] [3] [4] [5] [6] [7]

2.3-4. SATA Configuration

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Advanced

SATA Controller(s)	[Enabled]	Enable or disable SATA Device.
SATA Mode Selection	[IDE]	
Serial ATA Port 1	Empty	
Serial ATA Port 2	Empty	
Serial ATA Port 3	Empty	
Serial ATA Port 4	Empty	

++: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

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- **SATA Controller(s) [Enabled]**
This field is used to enable or disable for the Serial ATA Channels.
Configuration options: [Disabled] [Enabled]
- **SATA Mode [IDE Mode]**
Support IDE, AHCI or RAID mode
Configuration options: [Disable][IDE Mode][AHCI Mode][RAID Mode]

2.3-5. PCH-FW Configuration

This section is used to disable the PC at the hardware level in the event of loss or theft.
Configure Management Engine Technology Parameters

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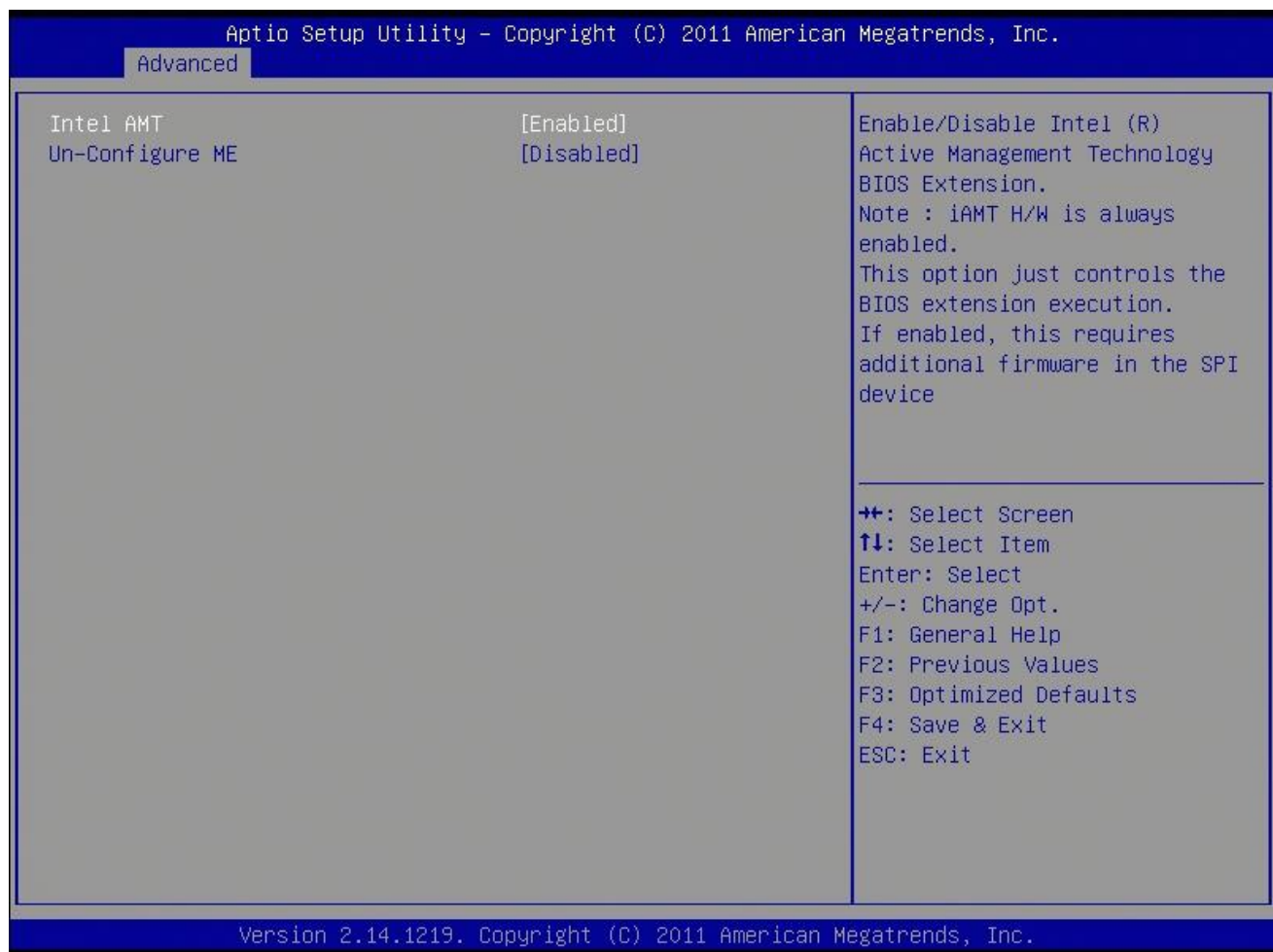
Advanced

ME FW Version	8.0.4.1441
ME Firmware Mode	Normal Mode
ME Firmware Type	Full Sku Firmware
ME Firmware SKU	5MB

↔+: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

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2.3-6. ATM Configuration



- **Intel AMT [Enable]**
 Enabled/Disabled AMT
 Configuration options: [Disabled] [Enabled]
- **Un-configure ME**
 Un-configure ME without password.
 Configuration options: [Disabled] [Enabled]

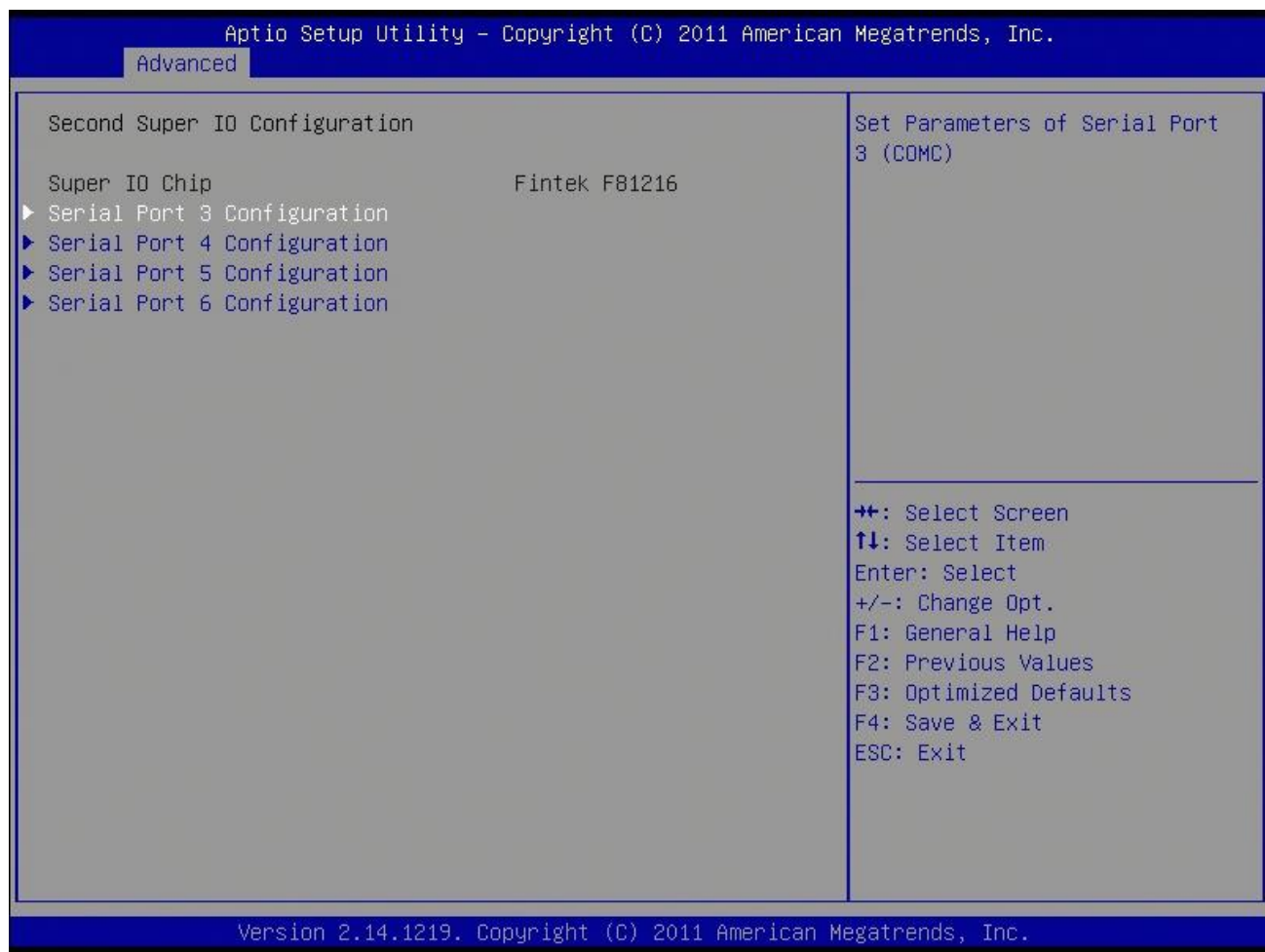
2.3-7 USB Configuration

USB Configuration Parameters

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.		
Advanced		
USB Configuration		Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.
USB Module Version	8.10.27	
USB Devices: 1 Point, 2 Hubs		
Legacy USB Support	[Enabled]	
		++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.		

- **USB Device**
Display how many devices are connected.
- **Legacy USB Support [Enabled]**
Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.
Configuration options: [Enabled] [Disabled][Auto]

2.3-8. Second Super IO Configuration



- **Second Super IO Configuration**
Display 2nd Super IO information

2.3-8-1. Serial Port 3/4/5/6 Configuration

Set Parameters of Serial Port 3/4/5/6 (COM3/4/5/6)

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Advanced

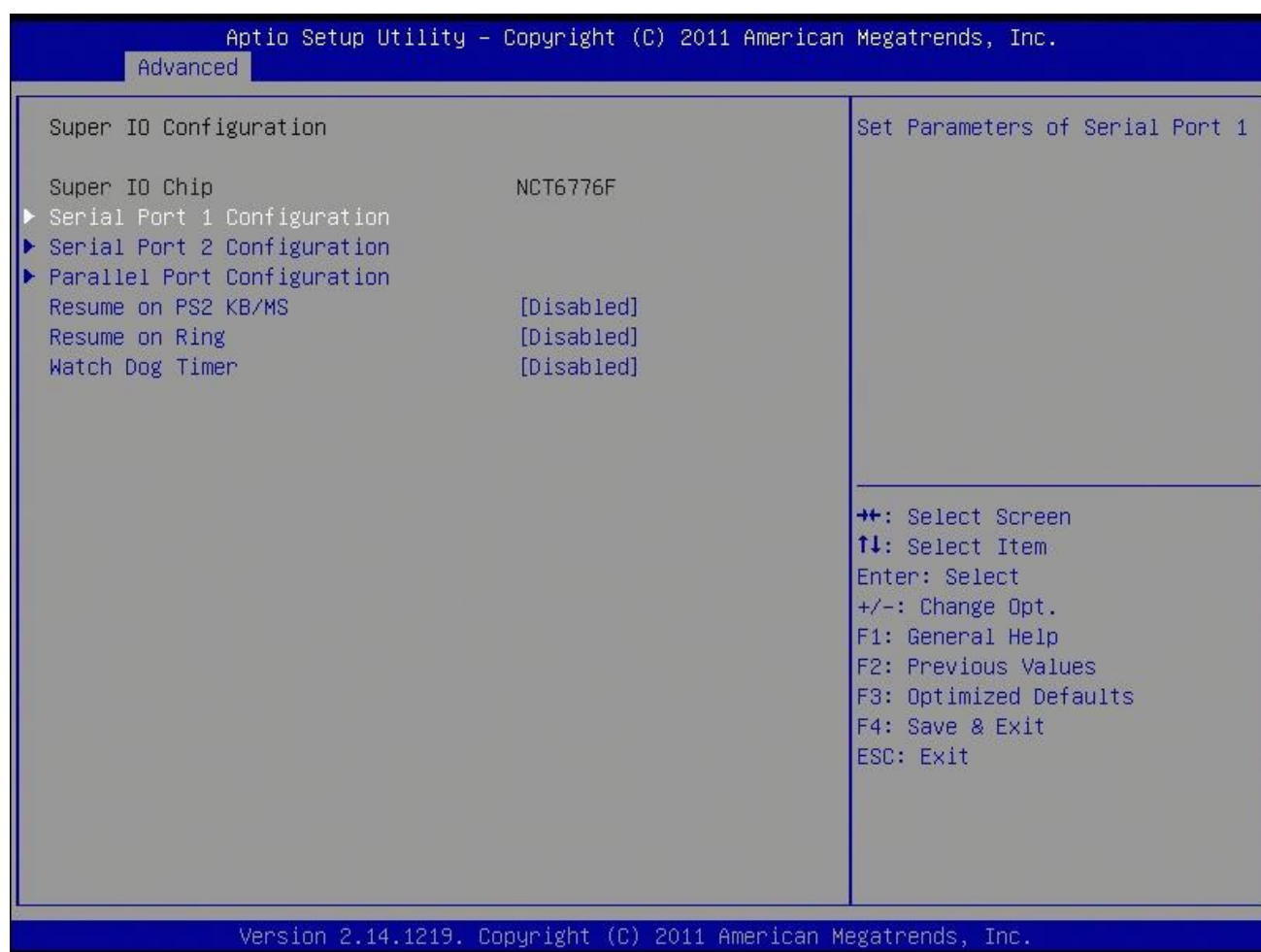
Serial Port 3 Configuration		Enable or Disable Serial Port (COM)
Serial Port	[Enabled]	
Device Settings	IO=3E8h; IRQ=5;	
Change Settings	[Auto]	

⇐⇐: Select Screen
 ↑↓: Select Item
 Enter: Select
 +/-: Change Opt.
 F1: General Help
 F2: Previous Values
 F3: Optimized Defaults
 F4: Save & Exit
 ESC: Exit

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- **Serial Port [Enable]**
Enable or Disable Serial Port.
Configuration options: [Disabled] [Enabled]
- **Device setting**
Display serial port(COM) setting.
- **Change Setting [Auto]**
Select the IO/IRQ setting of the I/O device

2.3-9. Suport IO Configuration



- **Resume on PS2 KB/MS [Disabled]**
Configuration options: [Disabled] [Enabled]
- **Resume on Ring [Disabled]**
Configuration options: [Disabled] [Enabled]
- **Watch Dog Timer [Disabled]**
Configuration options: [Disabled] [Enabled]

2.3-9-1. Serial port 1/2 Configuration

Set Parameters of Serial Port 1/2 (COM1/2)

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Advanced

Serial Port 1 Configuration		Enable or Disable Serial Port (COM)
Serial Port	[Enabled]	
Device Settings	IO=3F8h; IRQ=4;	
Change Settings	[Auto]	

++: Select Screen
 ↑↓: Select Item
 Enter: Select
 +/-: Change Opt.
 F1: General Help
 F2: Previous Values
 F3: Optimized Defaults
 F4: Save & Exit
 ESC: Exit

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Serial Port Configuration

- **Serial Port [Enable]**
Enable or Disable Serial Port.
Configuration options: [Disabled] [Enabled]
- **Device setting**
Display serial port(COM) setting.
- **Change Setting [Auto]**
Select the IO/IRQ setting of the I/O device

2.3-9-2. Parallel port Configuration

Set Parameters of Parallel Port

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Advanced

Parallel Port Configuration		Enable or Disable Parallel Port (LPT/LPTE)
Parallel Port	[Enabled]	
Device Settings	IO=378h; IRQ=7;	
Change Settings	[Auto]	
Device Mode	[STD Printer Mode]	

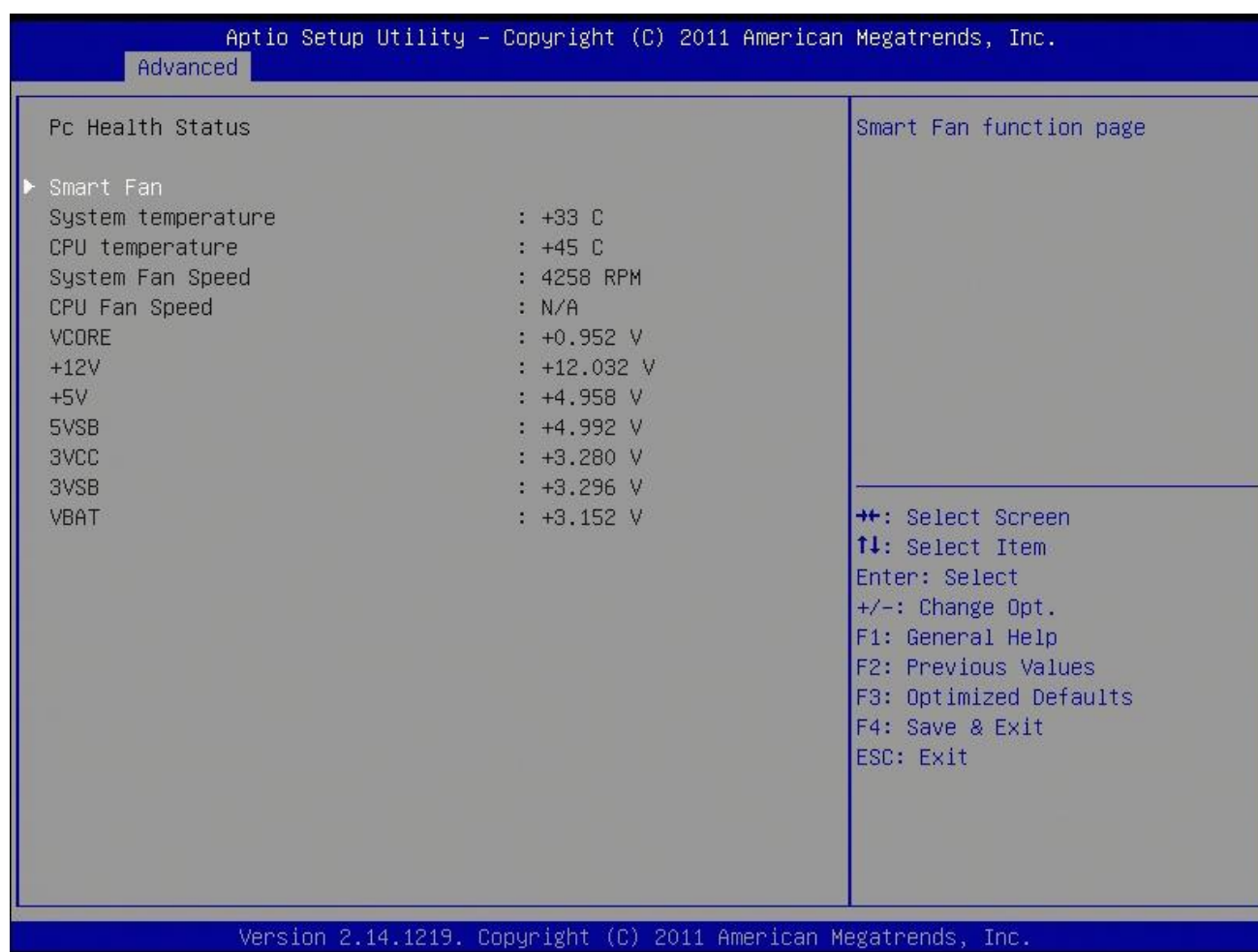
++: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit

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- **Parallel Port [Enable]**
Enable or Disable Parallel Port.
Configuration options: [Disabled] [Enabled]
- **Device Settings**
Display Parallel port setting.
- **Change setting [Auto]**
Select the IO/IRQ setting of the I/O device
- **Device Mode [STD Printer Mode]**
Select the mode setting of the I/O device

2.3-10. H/W Monitor



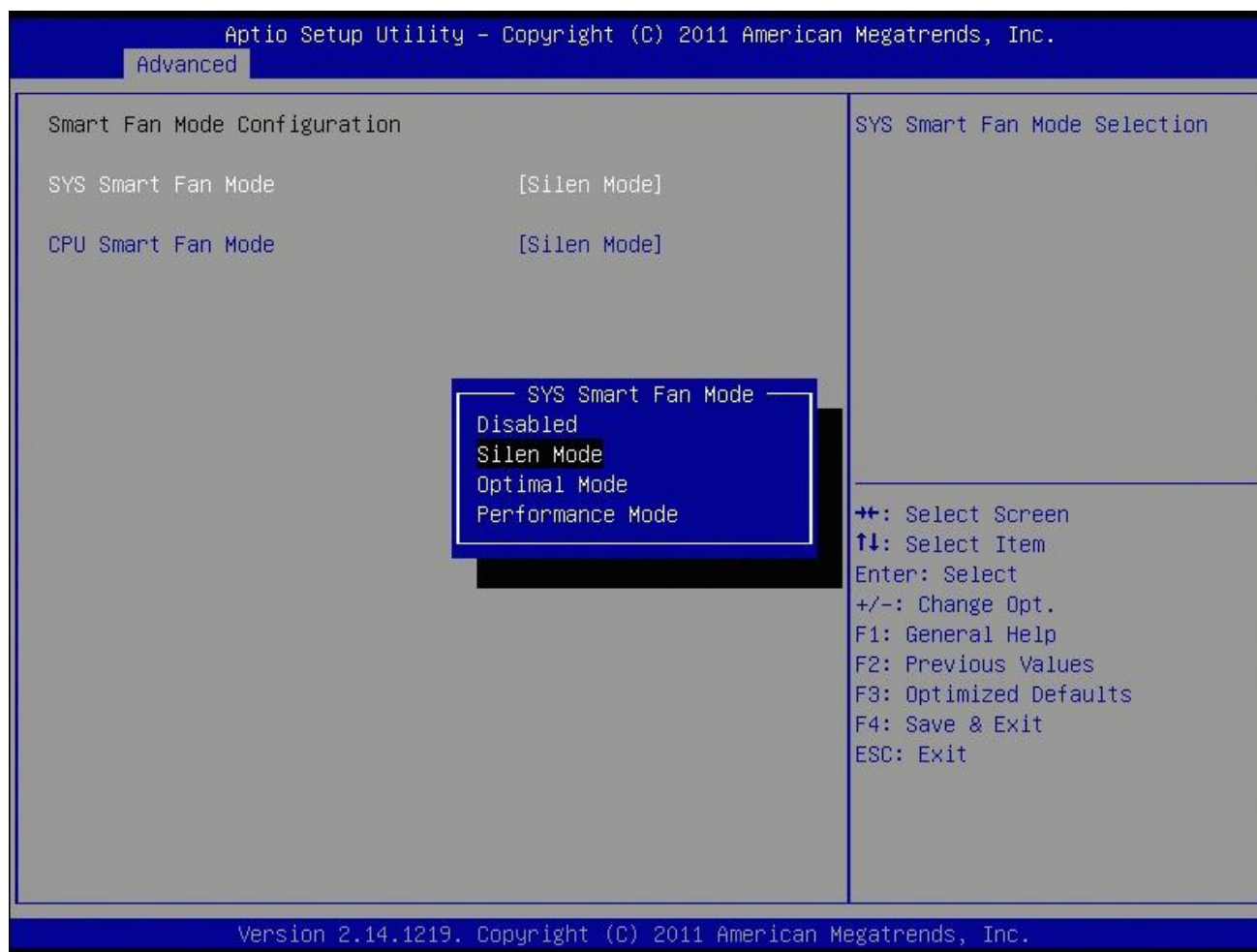
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- **PC Health Status**
Display hardware status.

2.3-10-1. Smart Fan Mode Configuration



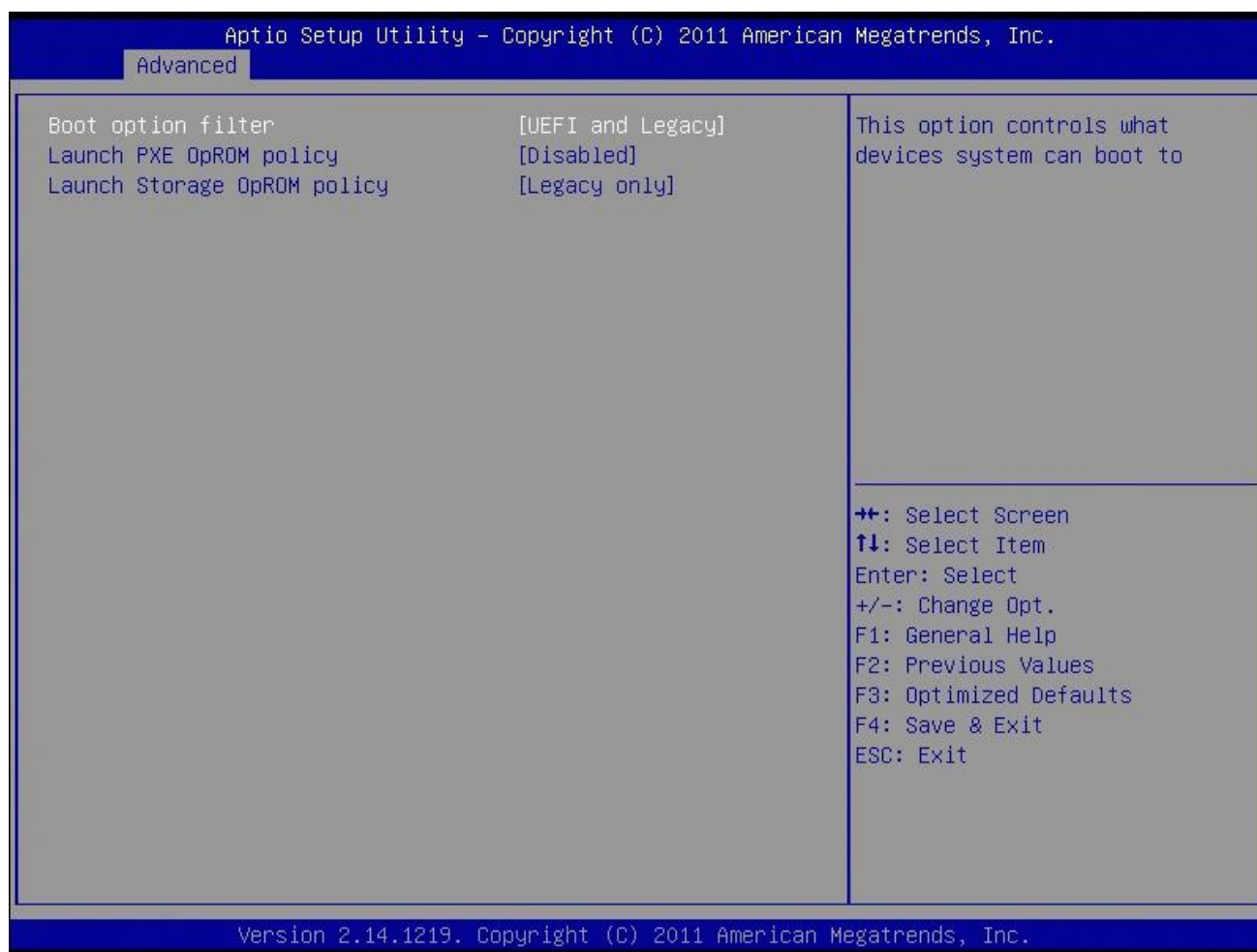
- **Smart Fan Function [Enable]**
 Enable or Disable Smart Fan Function.
 Configuration options: [Disabled] [Enabled]
- **Smart Fan Mode Configuration**
 Select CPU & System Fan mode



When this feature is set to automatic the CPU's fan speed will rotate according to the CPU's temperature, the higher the temperature, the faster the speed of rotation.

Configuration options: [Silen Mode] [Optimal Mode][Performance Mode]

2.3-11. Option Rom Policy



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- **Boot option filter [UEFI and Legacy]**
This option controls what devices system can boot to
Option for [UEFI and Legacy][Legacy only][UEFI only]
- **Launch PXE OProm Policy[Disable]**
Controls the execution of UEFI and Legacy PXE OpROM
Option for Enable or Disable
- **Launch Storage OProm policy[Legacy only]**
Controls the execution of UEFI and Legacy storage OpROM

2.3-12. CPU PPM Configuration



- **EIST [Enable]**
Enable or Disable Intel Speedstep.
Configuration options: [Disabled] [Enabled]
- **Turbo Mode [Enable]**
Enable or Disable Intel Turbo Mode.
Configuration options: [Disabled] [Enabled]
- **CPU C3/C6/C7 Report [Enable]**
Enable or Disable CPU C3,C6 and C7 report to OS
Configuration options: [Disabled] [Enabled]

2.5. Chipset



2.5-1. PCH-IO Configuration

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Chipset

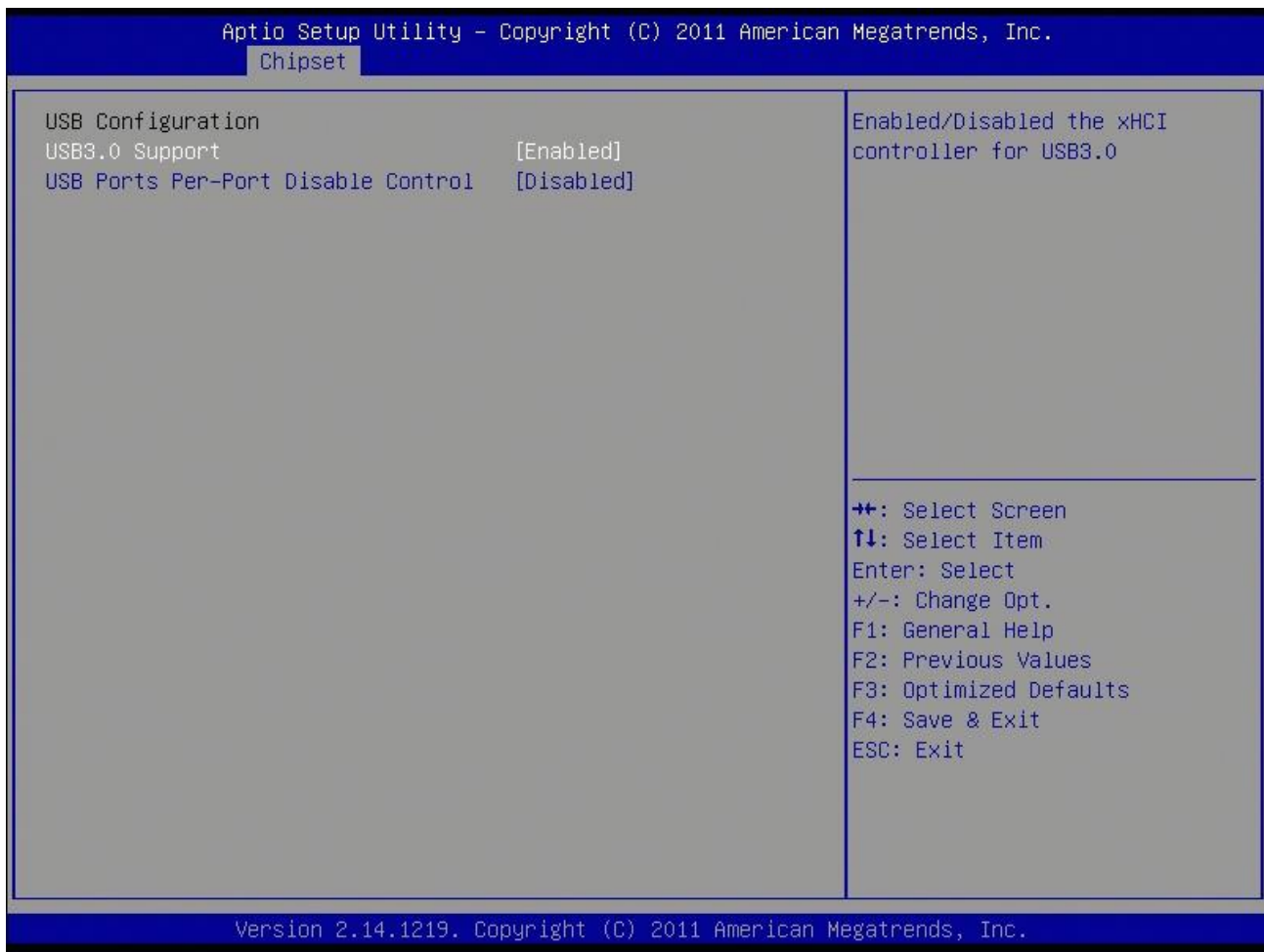
Intel PCH RC Version	1.1.0.0	USB Configuration settings
Intel PCH SKU Name	QM77	
Intel PCH Rev ID	04/C1	
▶ USB Configuration		++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit
▶ PCH Azalia Configuration		
LAN1 Controller	[Enabled]	
Wake on LAN1	[Enabled]	
LAN2 Controller	[Enabled]	
Restore AC Power Loss	[Power Off]	
Amplifier GAIN(db)	[6 db]	
COM3 Voltage Selection	[5V]	
VGA 12V Configuration	[Disabled]	

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- **Lan 1 Controller [Enable]**
Option for [Enable] [Disable]
- **Wake on Lan1[Enable]**
Enable or Disable integrated Lan to wake the system(The wake on lan can not be disabled if ME is on at Six state)
Option for [Enable][Disable]
- **Lan 2 Controller [Enable]**
Control the PCI Express Root port
Option for [Disable][Enable]
- **Restore AC Power Loss [Power off]**
Select AC Power state when power is re-applied afer a power failure.
Option for [Power off][Power on][Last State]
- **Amplifier GAIN(db) [6 db]**
Select onboard speaker output amplifier gain.
- **COM3 Voltage Selection [5V]**
Select rear IO COM3 connector power output
Option for [5V][12V]

- **VGA 12V Configuration [Disable]**
Select rear IO VGA connector power output

2.5-1-1. USB Configuration



- **USB3.0 Support [Enabled]**
Enable/Disable USB 3.0 support
Configuration options: [Disabled] [Enabled]
- **USB Ports Per-Port Disable Control [Disabled]**
Enable/Disable USB Ports Per-Port control support
Configuration options: [Disabled] [Enabled]

2.5-1-2. PCH Azalia Configuration

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.	
Chipset	
PCH Azalia Configuration	
Azalia	[Auto]
Control Detection of the Azalia device. Disabled = Azalia will be unconditionally disabled Enabled = Azalia will be unconditionally Enabled Auto = Azalia will be enabled if present, disabled otherwise.	
++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit	
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.	

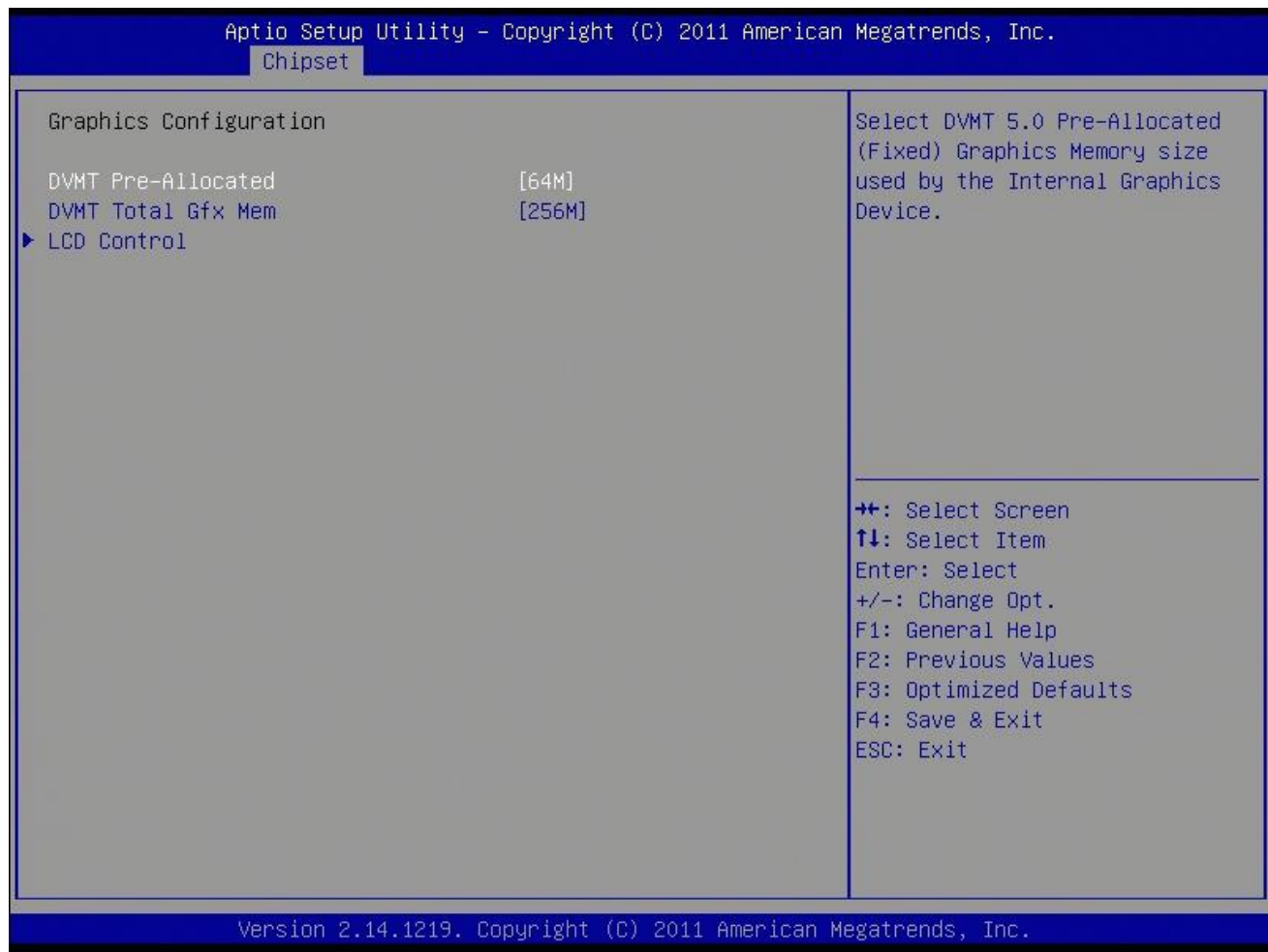
- **PCH Azalia configuration setting [Auto]**
Option for [Disable][Enable][Auto]

2.5-2. System Agent(SA) Configuration

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.		
Chipset		
System Agent Bridge Name	IvyBridge	Check to enable VT-d function on MCH.
System Agent RC Version	1.1.0.0	
VT-d Capability	Supported	
VT-d	[Enabled]	
▶ Graphics Configuration ▶ Memory Configuration		
++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit		
Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.		

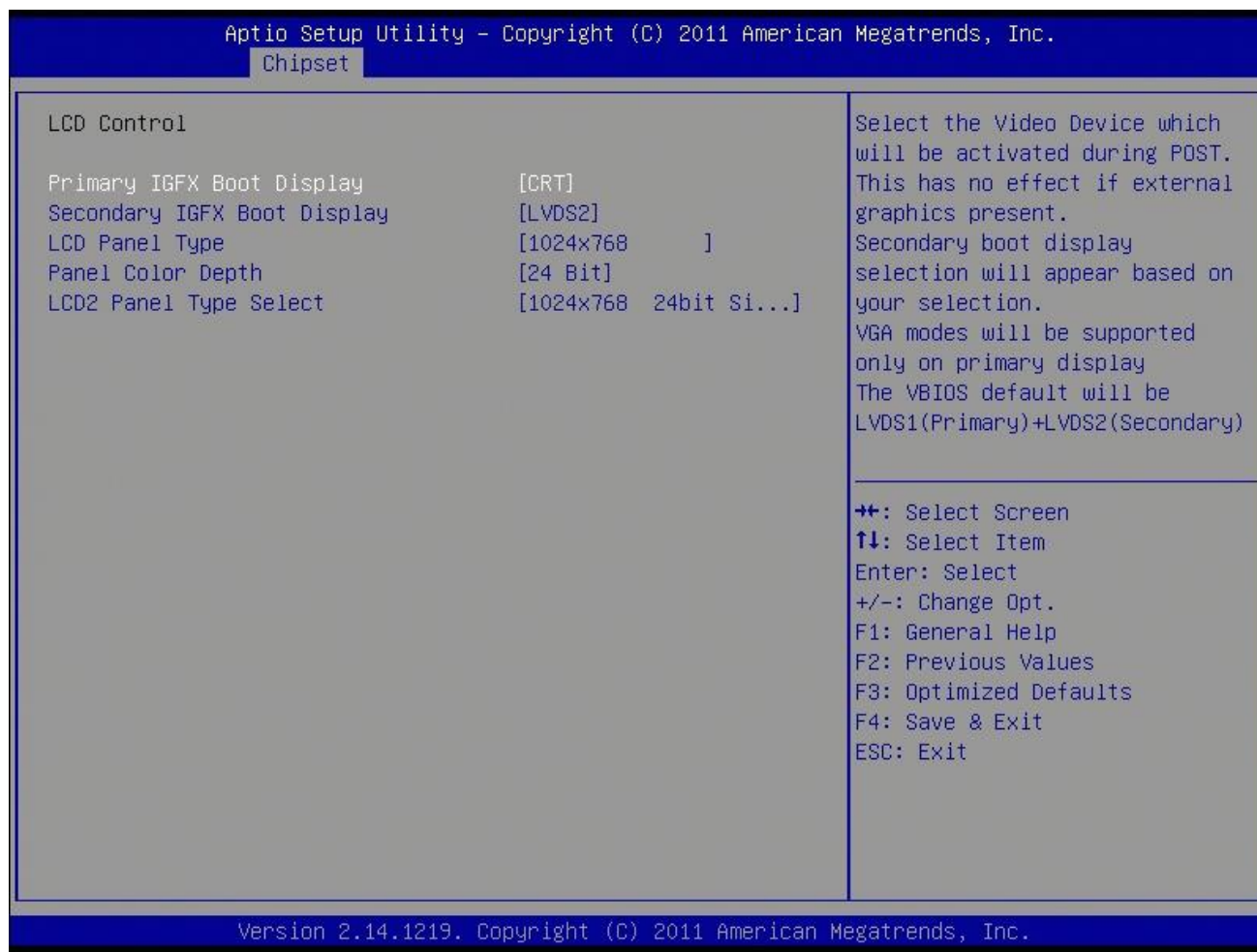
- **VT-d [Disable]**
Set VT-d Enable or Disable
Configuration options: [Disabled] [Enabled]

2.5-2-1. Graphics Configuration



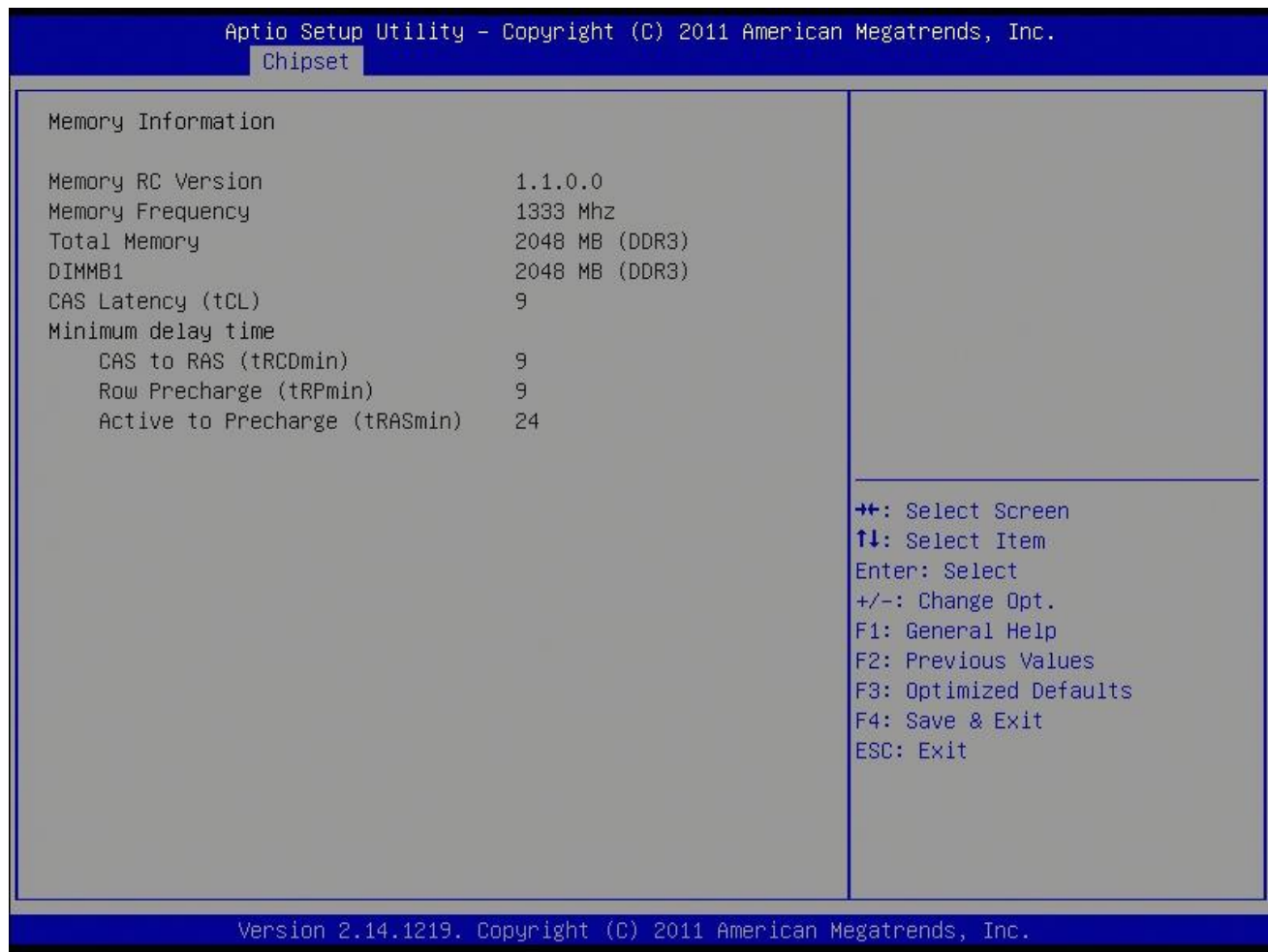
- **DVMT Pre –Allocated [64M]**
Select DVMT 5.0 Pre-Allocated(Fixed) Graphics Memory size used by the Internal Graphics Device.
- **DVMT Total Gfx Mem [256M]**
Select DVMT 5.0 Total Graphic Memory size used by the Internal Graphics Device.

2.5-2-1-1. LCD control



- **Primary IGFX Boot Display [CRT]**
Select the display port which be activated during POST. This has no effect if external graphics present.
- **Secondary IGFX Boot Display [LVDS2]**
Select the 2nd display port which be activated during POST.
- **LCD Panel Type [1024x768]**
Select LCD panel type for LVDS port
- **Panel color Depth [24 Bit]**
Select the LFP panel color depth
- **LCD2 Panel Type Select [1024x768 24bit]**
Select LCD panel type for LVDS2 port

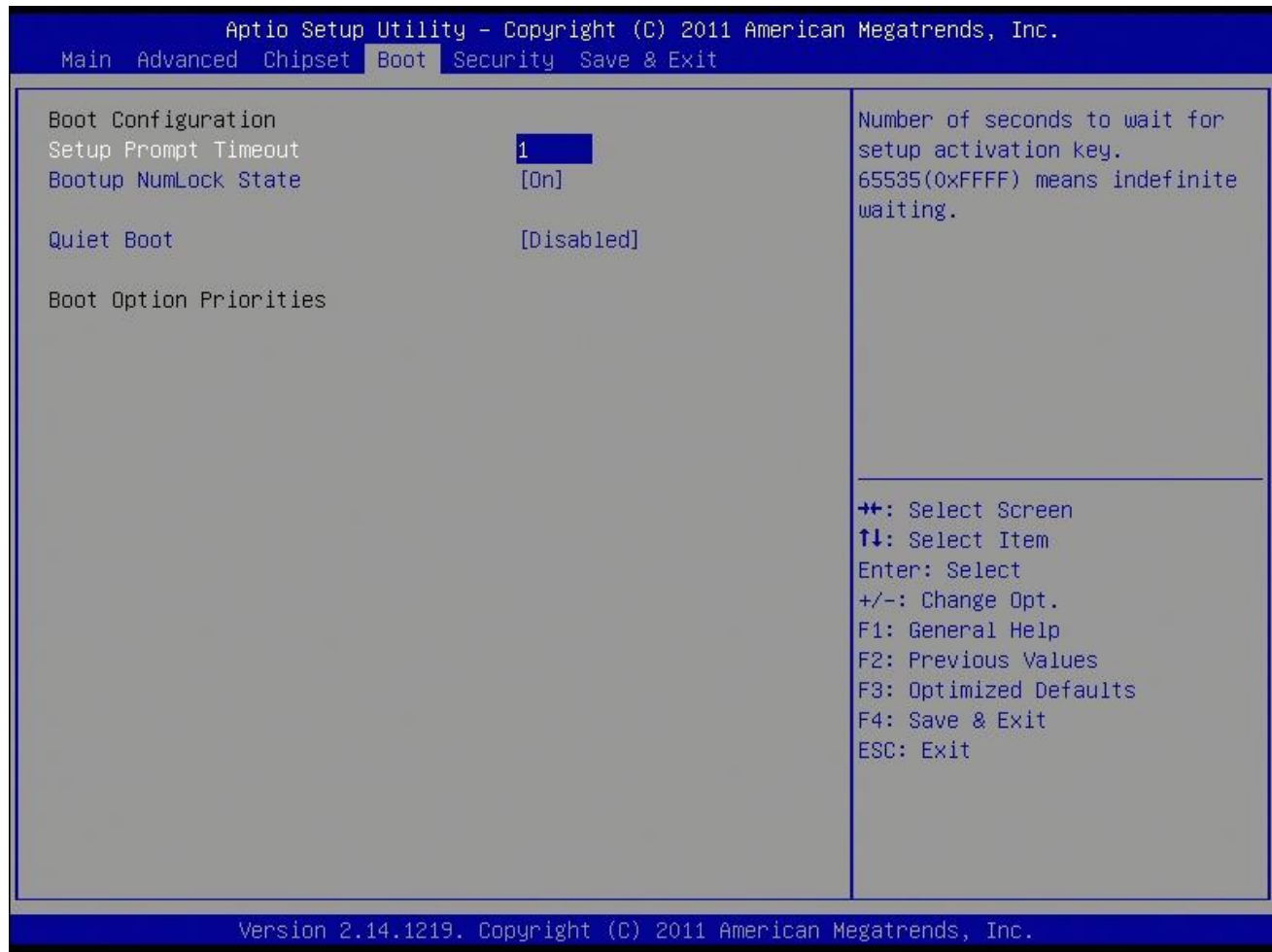
2.5-2-2. Memory Configuration



- **Memory Configuration**
Display system memory information

2.6. Boot

Boot Configuration



- **Setup Prompt Timeout [1]**
Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
- **Bootup NumLock State [On]**
Select the keyboard NumLock state
Configuration options: [On] [Off]
- **Quick Boot [Disable]**
Configuration options: [Disable] [Enable]

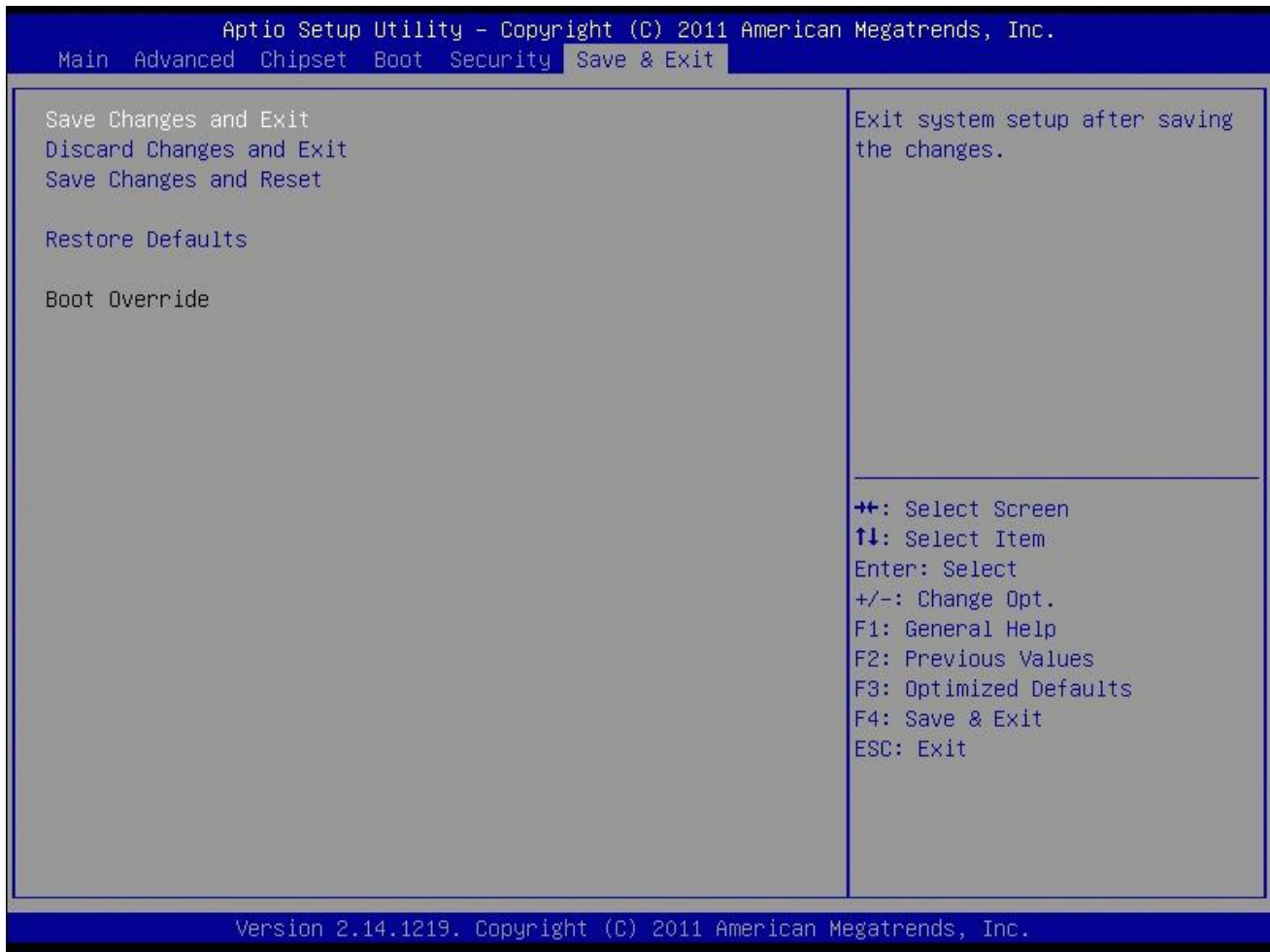
2.7 Security

Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.					
Main Advanced Chipset Boot Security Save & Exit					
<p>Password Description</p> <p>If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup.</p> <p>If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights.</p> <p>The password length must be in the following range:</p> <table> <tr> <td>Minimum length</td> <td>3</td> </tr> <tr> <td>Maximum length</td> <td>20</td> </tr> </table> <p>Administrator Password</p> <p>User Password</p>	Minimum length	3	Maximum length	20	<p>Set Administrator Password</p> <hr/> <p> ++: Select Screen ↑↓: Select Item Enter: Select +/-: Change Opt. F1: General Help F2: Previous Values F3: Optimized Defaults F4: Save & Exit ESC: Exit </p>
Minimum length	3				
Maximum length	20				

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- **Administrator Password**
Set setup Administrator Password
- **User Password**
Set User Password

2.8 Save & Exit



- **Save changes and Exit**
Exit system setup after saving the changes.
- **Discard changes and Exit**
Exit system setup without saving the changes.
- **Save changes and Reset**
Reset the system after saving the changes.
- **Restore Defaults**
Restore/Load default values for all the setup option.

6. Troubleshooting

(1) Network Issues

Symptom	Corrective Procedure
Cannot access LAN	<ul style="list-style-type: none">▪ Check if hub or switch is working correctly▪ Check RJ45 cable connection▪ Check if LAN LEDs are on/off▪ Reinstall LAN card▪ Replace motherboard

(2) MSR Issues

Symptom	Corrective Procedure
MSR does not respond	<ul style="list-style-type: none">▪ Check MSR reader cable connection▪ Check motherboard and LCD cable connection▪ Check MSR board cable connection

(3) USB Issues

Symptom	Corrective Procedure
USB port doesn't work	<ul style="list-style-type: none">▪ Check Windows device manager for device recognition▪ Check USB device status and connection▪ Erase and re-install USB driver▪ Change USB device

(4) LCD Issues

Symptom	Corrective Procedure
LCD backlight doesn't work	<ul style="list-style-type: none">▪ Check LCD cable connection▪ Check inverter cable connection▪ Replace inverter cable▪ Change LCD panel

(5) Touch-screen Issues

Symptom	Corrective Procedure
Touch-screen doesn't detect touch operations	<ul style="list-style-type: none"> ▪ Check touch-screen cable connection ▪ Check motherboard and LCD cable connection ▪ Check BIOS set-up

(6) Power Issues

Symptom	Corrective Procedure
System switches off abruptly and system does not load	<ul style="list-style-type: none"> ▪ Check A/C cable connection ▪ Check motherboard power connection ▪ Check CPU settings/status ▪ Check DRAM settings ▪ Check power button cable connection ▪ Change power adaptor unit

(7) PS/2 Keyboard Issues

Symptom	Corrective Procedure
PS/2 Keyboard Issues	<ul style="list-style-type: none"> ▪ Check card-reader cable ▪ Check CN6 jumper

(8) Booting Issues

Symptom	Corrective Procedure
Re-booting during system operation	<ul style="list-style-type: none"> ▪ Check SATA cable connection ▪ Check memory status

7. Maintenance

Safety Warning

POSBANK will not be held responsible for repairs conducted via service providers other than those officially specified by the seller.

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General Guidelines

1. Always disconnect the unit from the power outlet.
2. Disconnect all cables from the POS main unit before attempting reparation.
3. Keep all components in the static-proof packaging provided until ready for installation.
4. If the device still is not functioning after repair, please turn off the POS unit and contact the customer service center for a follow-up inspection.
5. We recommend that power supply unit (PSU) checks and monitor repairs only be performed at a certified service center.